

**MISSING THE PRESENT FOR THE UNKNOWN: THE RELATIONSHIP BETWEEN
FEAR OF MISSING OUT (FoMO) AND LIFE SATISFACTION**

by

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DECLARATION

I, Tsholofelo Ella Jood, student number 47289538, declare that the dissertation titled “Missing the Present for the Unknown: The relationship between Fear of Missing Out and Satisfaction with Life” is my own work, and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that ethical clearance to conduct the research has been obtained from the Department of Psychology, University of South Africa.

Tsholofelo Ella Jood

April 2017

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**MISSING THE PRESENT FOR THE UNKNOWN: THE RELATIONSHIP BETWEEN
FEAR OF MISSING OUT AND SATISFACTION WITH LIFE**

Summary

Fear of missing out (FoMO) is a type of internet slang used to describe the “pervasive apprehension that others might be having rewarding experiences from which one is absent” (Przybylski, Murayama, DeHaan & Gladwell, 2013, p. 1841). This pervasive fear encompasses an individual’s life and it is exacerbated by the social media updates of online counterparts. A study conducted by a South African pharmaceutical company revealed that 62% of the respondents have a constant fear of missing out on something that might be happening elsewhere. This study underscores the relevance of studying FoMO as a construct in the South African context. The current study aims to investigate the relationship between FoMO and satisfaction with life, as these two constructs have previously shown to be negatively correlated. The self-proclaimed FoMO sufferers who will be partaking in this study will be requested to complete an online questionnaire to establish the nature of the relationship between FoMO and satisfaction with life.

KEY TERMS

Fear of missing out, social media, social media status updates, social networks, internet, satisfaction with life, subjective well-being, discontentment, social status, technology, human motivation, comparison, existential vacuum

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Chapter 1: Introduction

1.1 Background:

“True happiness is to enjoy the present, without anxious dependence upon the future, not to amuse ourselves with either hopes or fears but to rest satisfied with what we have, which is sufficient, for he that is so wants nothing. The greatest blessings of mankind are within us and within our reach. A wise man is content with his lot, whatever it may be, without wishing for what he has not” (Seneca, L'Estrange & Bierce, 1855, p. 74).

Seneca, L'Estrange & Bierce (1855) captured the essence of what Fear of missing out (FoMO) encompasses, as it has to do with the feeling of discontentment with the present, and a wish for more than what one has. The concept of FoMO is a type of internet slang used to describe the “pervasive apprehension that others might be having rewarding experiences from which one is absent” (Przybylski et al., 2013, p.1841). This pervasive fear encompasses an individual's life and it is exacerbated by the social media updates of the experiences of other individuals (Przybylski et al., 2013). Wortham (2011) argued that scrolling through the pictures and status updates of others evokes a fear, which she refers to as the darker side of FoMO.

According to Przybylski et al. (2013) FoMO is not a novel phenomenon, the only novel thing is the increased level of access people have to other people's lives through the use of social media. Moreover, people who have high levels of FoMO are more concerned with what others are doing that they neglect to enjoy themselves in the present moment (Przybylski et al., 2013).

A study undertaken by a South African pharmaceutical company on a sample of 3000 South African participants, from the age of 15 to 50 years, revealed that 62% of the respondents have a constant fear of missing something that might be happening elsewhere. This research was centred around the physiological factors of stress, which are exacerbated by the constant need to be doing something and checking social media to see if you are doing enough or what others are doing ("It's official: South Africans have FOMO," 2012). People who suffer from FoMO push themselves even when their health is compromised, they will not miss a social event or work, which puts them at risk for more

severe illnesses because their behaviour puts their immune systems under serious strain ("It's official: South Africans have FOMO," 2012).

Based on the study mentioned above, one cannot deny that the phenomenon of FoMO may be prevalent in South Africa. It is worth studying this phenomenon further and enriching our understanding of how FoMO presents itself in South Africa. It is also important to note that it has been reported that South Africans are the most zealous tweeters in Africa, with South Africans tweeting five-million tweets the last 3 months of 2011 ("It's official: South Africans have FOMO," 2012).

1.2 Problem Statement:

As social beings, human beings have this innate need to belong to groups. It can be further argued that these groups exist in both the physical and the virtual realms (Abel, Buff & Burr, 2016). In the social media era, it has become much easier for one to keep track of what others are doing and the motivation to engage in this behaviour varies from person to person (Abel et al., 2016). As stated earlier, FoMO comprises of the feeling of discontentment that others are engaging in something more rewarding, and the pressure to obtain a better social position than the one one is currently at. It has been argued that the level of one's self-esteem impacts the level of FoMO experienced (Abel et al., 2016). Abel et al. (2016) argued that self-esteem has an evaluative component of self-concept. Low self-esteem has been associated with increased levels of depression and anxiety (Abel et al., 2016). Increased social anxiety has been linked to low self-esteem. Abel et al. (2016) further argued that increased social media use can be associated with the level of satisfaction in oneself.

Fear of missing out is argued to induce negative behaviours and result in negative emotions (Abel et al., 2016). Easy access to information about how other people live can result in one effortlessly comparing oneself to others, and feeling inadequate. This feeling of inadequacy can induce behaviours which are believed to confer more belongingness (Abel et al., 2016). The managing director of 1Life Laurence Hillman, argued that FoMO makes people live beyond their means, and the definition of needs and wants becomes nebulous ("Fear of missing out spells danger", 2014). It is evident FoMO has an impact

on the lives of those who suffer from it. The research problem is to investigate whether the possible subjective level of life discontentment experienced by self-proclaimed FoMO sufferers, is negatively correlated to the level of FoMO experienced.

1.3 The Purpose of The Study:

The problems studied in a research study should lead to a greater understanding of the phenomenon being researched, and possible interventions that will be of value to the society (Terre Blanche, Durrheim & Painter, 2006). The purpose of this study is to understand FoMO within a South African context, and investigate the extent of the impact that FoMO has on the lives of self-proclaimed FoMO sufferers, if it has an impact at all. Most of the research on FoMO as a phenomenon has been done internationally and there is not much research done within the South African context. The study mentioned earlier, which revealed that 62% of the participants reported experiencing FoMO, shows that the phenomenon of FoMO is prevalent. Furthermore, there is a need to understand the construct of FoMO within South Africa.

1.4 The General Aim of The Study:

The objective of this study is to investigate whether the subjective sense of life contentment of self-proclaimed FoMO sufferers decreases, if the intensity of FoMO increases. The research aims to contribute to an understanding of the phenomenon of FoMO in the South African context and establish if there are variations in how FoMO presents itself in the South African context, as opposed to research done in other countries.

The hypothesis for the study is that FoMO is negatively correlated to an individual's life satisfaction.

1.5 Literature overview:

One cannot deny the influence social media has on the structure of society, because of its efficiency, real-time contact and accessibility, social media has transformed social discourse and social patterns immensely (Asur & Huberman, 2010). A study undertaken by Asur and Huberman (2010) showed that social media can be used to predict the future success of a movie, in terms of the predicted revenue. The study indicated a high correlation between the amount of attention (in terms of tweets) a movie received on twitter before its release, and the actual revenue a movie makes upon release (Asur & Huberman, 2010).

Asur and Huberman (2010) argued that the more attention a movie is given on social media; the more revenue it generates. This study can be linked to how social media can play a pivotal role in FoMO, since social media is a platform of seeing what the masses are doing and evoking a fear of missing the prescribed experience. One cannot deny that FoMO may be related to the concept of keeping up with the Joneses. Baumeister and Leary (1995) argued that social exclusion evokes anxiety because it is indicative of a lack of connection or belongingness to a social system.

The concept of an existential vacuum coined by Viktor Frankl refers to the feeling of meaninglessness and emptiness which humans experience (Frankl, 1972). Frankl (1972) believed that human beings are no longer motivated by instinct when it comes to behaviour, nor is their behaviour motivated by traditions and values. Frankl (1972) held that humans are controlled by conformity which means that the motive for behaviour is induced by what others are doing, or totalitarianism which means the motive for behaviour is simply sanctioned by what other people want.

The concept of an existential vacuum can be linked to the concept of FoMO; since self-proclaimed FoMO sufferers want to do things because other people are doing them, or they do things other people prescribe to them (such as purchasing the next greatest item based on the opinions of others). FoMO seems to be highly influenced by social networking. Platforms such as Facebook, Twitter, Instagram, and LinkedIn promote attentiveness of what one has or does not have, defining one's social status. By realising what alternatives exist out there, one may feel a lack of satisfaction with their social status

(Hedges, 2014). This is an analogy of how social media can be a catalyst for not only keeping up with others, moreover social media can also be used as a means for comparing and evaluating one's life to what others are depicting to them in the social platforms (Hedges, 2014).

People have always been concerned with their social status, however with the increased use of social media FoMO is more prevalent (White, 2013). FoMO is associated with the number of times young people check their social media. Higher frequency Facebook use has been associated with diminished wellbeing in adolescents, particularly increased feelings of disconnectedness and increased social anxiety (Wallace, 2014).

The researcher would like to provide an understanding of FoMO using the Human Motivation theory. This theory asserts that what makes a human being a social being is the ability to compare oneself to others (Festinger, 1954). Particularly, the aspect of comparing the activity one is partaking in, against what other people are doing, in this context (Festinger, 1954). A study conducted on students indicated that those who spent more time on Facebook, tended to compare themselves more than their counterparts (Alt, 2015).

According to Maslow (1943) human beings have needs which are organised in a hierarchical manner. Once the lower order needs are met higher needs emerge, among these higher order needs is the need for love, affection, and belongingness (Maslow, 1943). These inherent needs can be related to FoMO, as FoMO has been described to emerge because of frustration from certain needs not being appropriately met (Przybylski et al., 2013).

The need for self-esteem follows the need for love, affection, and belongingness. This need has to do with the evaluation of oneself. This evaluative process is according to the level which one strives for individuation, as well as the amount of recognition received from others (Maslow, 1943). The meeting of this need leads to an increased self-confidence. However, if this need is not met it leads to increased discontentment (Maslow, 1943). One could argue that when this need is not met, FoMO may emerge because of discontentment, and the individual may engage in compensatory neuroticism (Maslow,

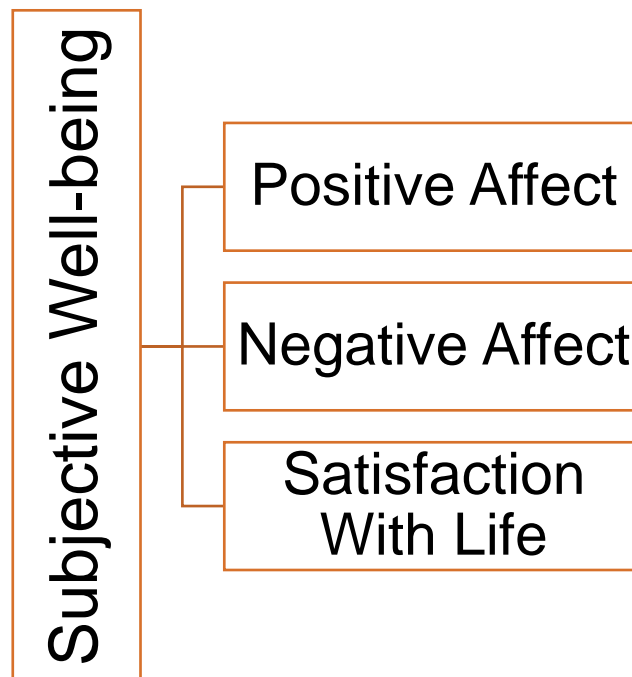
1943). This compensatory neuroticism may include the constant FoMO and constant checking of social media platforms.

The self-determination theory asserts that effective self-regulation and psychological wellbeing depends on the satisfaction of three needs, namely; competency, autonomy, and relatedness. FoMO has been argued to result from the frustration of these needs not being appropriately met. Social media engagement can be argued to appease the sense of disconnectedness an individual may feel (Przybylski et al., 2013). However, social media engagement may also result in negative emotion states as well (Abel et al., 2016).

Frankl (2000) argued that individuals tend to focus on certain aspects of their lives which results in intense preoccupation and apprehension; with regards to these aspects of life. This apprehension and preoccupation can be likened to FoMO as an individual may become preoccupied with missing out, that they may be absent from the present moment. Frankl (2000) introduced the concept of an existential crisis, which occurs when life becomes devoid of meaning for a human being. He argued this lack of meaningfulness results in an individual seeking to find ways in which they can fill this existential vacuum they experience. However, the idea of filling this vacuum is illusive (discontentment may emerge) and may result in neurotic patterns (FoMO) which aim to appease the sense of discontentment (Frankl, 2000).

The concept of subjective well-being has been argued to comprise of three distinct components. These three components include positive affect, negative affect, and satisfaction with life. The first two components refer to emotional states, and the last component is a judgemental process.

1.5.1 Figure 1.1



Diener and Emmons (1985) argued that positive affect, life satisfaction and negative affect are not opposites, instead they display independent dimensions. They further asserted that one's subjective wellbeing cannot be fully understood without looking at all three of these dimensions. Although, various studies have attempted to examine the affective component of subjective wellbeing, neglecting the component of general satisfaction with life (Diener & Emmons, 1985).

According to Shin and Johnson (1978) the definition of life satisfaction is an evaluation of the quality of an individual's life based on a certain criterion. This process of evaluation includes comparison with a particular standard which an individual uses as a benchmark. Neto (1992) argued that this standard should not be contaminated by exogenous factors.

The concept of subjective well-being should be based on an individual's judgement, which is not limited by the domains deemed important by the researcher (Neto, 1992). According to Diener (1984), the assessment of satisfaction with life requires the researcher to use values to assess satisfaction according to the factors which are associated with satisfaction, and adding these values to establish a measure of one's satisfaction with life. However, he proposed that a measure of an individual's general satisfaction should

be obtained instead of focusing on these specific factors, which may not encompass all the subjective factors deemed to affect an individual's subjective well-being (Neto, 1992).

1.6 Dissertation Chapter Outline:

The chapters of this dissertation will be structured in the following format:

Chapter One: This brief chapter provides an introduction to the study and an outline of all the chapters in the dissertation.

Chapter Two: The relationship between FoMO and social media will be discussed in the chapter, and the relevant studies which reported on this relationship will be explored. How the technological climate has shaped interactions, as well as the behaviour of individuals will be discussed. The FoMO and the anxieties associated with decision making will be viewed. The act of decision making in relation to FoMO will be explored. The effect FoMO has on psychological wellbeing will be discussed and the relevant study findings will be stated. The factors which induce FoMO and maintain it will be explored. The theory of social comparison will be discussed and how it relates to social media use will be argued. The theory of human motivation will be explored; and its applicability to FoMO as a psychological construct will be viewed. The concept of an existential vacuum is explained and it is associated to FoMO.

Chapter Three: This chapter presents an in-depth discussion of the research design. The research approach used in this study will be stated. The sampling method used in the study will be presented. The instruments used to collect the data will be discussed, and the relevant reliability and validity information pertaining to these instruments will be examined. The techniques used to collect data will be discussed. The rationale for using an online questionnaire, comprising of the FoMO and Satisfaction with life (SWL) scales will be stated. Lastly the ethical considerations that govern the study will be discussed.

Chapter Four: This chapter examines the empirical findings of the study. The descriptive statistics from the study will be reported first. Then the correlational statistics of the study

will be examined, this will allow the researcher to report on the relationship between FoMO and satisfaction with life. This chapter will also include the interpretation of the results yielded from the data analysis.

Chapter Five: The researcher will present the discussion of the study based on the findings of the research. The limitations of the study will be examined and recommendations for further studies will be suggested. Lastly, the researcher will present the closing remarks of the study.

1.7 Conclusion:

In conclusion, FoMO is defined as a fear of missing a more rewarding experience. Fear of missing out is argued not to be a novel issue, however it seems to be presenting itself in a more unique manner in these present times. The influence of social media on FoMO cannot be denied. Findings from a study conducted by Przybylski et al. (2013) revealed there is an association between FoMO and the level of satisfaction with life. This study aims to understand if this association between FoMO and life satisfaction reported by Przybylski et al. (2013) exists in the South African context. The prevalence of FoMO in South Africa has been reported on, however there seems to be a gap in getting a better understanding of the construct of FoMO and its associations. The study aims to gain a better understanding of FoMO in the South African population.

Chapter 2: Literature Review

2.1 Introduction:

According to the Oxford Dictionaries, *Fear of missing out* (FoMO) is the “Anxiety that an exciting or interesting event may currently be happening elsewhere, often aroused by posts seen on a social media website” (“Fomo”, 2015). Wortham (2011) described FoMO as the apprehension of missing social events, interactions, or experiences. Przybylski et al. (2013) believe that this pervasive fear encompasses an individual’s life and it is exacerbated by the social media updates of the experiences of other individuals. Grohol (2013) argued that FoMO is a real feeling that permeates through a variety of social interactions.

Today, more than ever, people are exposed to a lot of details about what others are doing; and people are faced with the continuous uncertainty about whether they are doing enough or whether they are where they should be in terms of their life (JWTIntelligence, 2012). Quiet nights at home are plagued by the feeling of anxiety and social media time-line refreshing, to keep abreast with what friends are up to (JWTIntelligence, 2012). Personal email accounts are flooded with more subscriptions than necessary, and one finds it difficult to unsubscribe to the irrelevant subscriptions, with the fear of missing communication. People attend parties and end up being engrossed in their phones, checking social media feeding, emails, and instant messenger apps (JWTIntelligence, 2012).

Fear of missing out is characterised by the need to keep connected with what others are doing. Przybylski et al. (2013) conducted a research study which revealed there is a negative correlation between the level of FoMO and life satisfaction. Moreover, the study revealed that individuals under the age of 30 years are more susceptible to FoMO (Przybylski et al., 2013). This study also reported that males seem to suffer from FoMO more than females. More related to the South African context, the study mentioned earlier, which was undertaken by a South African pharmaceutical company underscored that 62% of the respondents experience a constant fear of missing something that might be happening elsewhere (“It's official: South Africans have FOMO”, 2012). This research was centred around the physiological effects of stress, which are aggravated by the

constant need to be doing something; and checking social media to see if one is doing enough and what others are doing ("It's official: South Africans have FOMO", 2012).

People who suffer from FoMO are not deterred by poor health, as they may attend social events, or even go to work even when they are ill. This makes them susceptible to severe illnesses, because of lack of self-care ("It's official: South Africans have FOMO", 2012). South Africans also received the title of the most zealous tweeters in the whole of Africa, tweeting 5 million tweets the last 3 months of 2011 (Barnett, 2012). These stats are important to be cognisant of, considering the next discussion, which is about the relationship between social media and FoMO.

2.2 FoMO and Social Media:

One cannot deny the influence social media has on the structure of society, because of its efficiency, real-time contact and accessibility, social media has transformed social discourse and the patterns of interaction immensely (Asur & Huberman, 2010). Considering this influence, it is relevant to discuss the tremendous growth in social media activity in South Africa between 2013-2014, Facebook grew by 28%, Twitter grew by 129%, and Instagram grew by 580% (as at August 2013) ("South African Social Media Landscape 2015", 2015). This growth in social media engagement, makes the dialogue about the influence of social media on the behaviour of South African's a relevant discussion.

Asur and Huberman (2010) conducted a study to establish the influence social media has on human behaviour. The study indicated that social media can be used to predict the future success of a movie, in terms of the revenue generated. The study showed a high correlation between the amount of attention (in terms of tweets) a movie received on twitter before its release, and the actual revenue a movie makes upon release (Asur & Huberman, 2010). This study revealed interesting information about how social media can influence behaviour, by exposing that the more attention a movie receives on social media platforms, the more people watch the movie.

The results of this study could be related to FoMO, as FoMO is related to the feeling that others may be experiencing a more rewarding experience than what one is. In the case

of movies receiving a lot of publicity via social media, the FoMO sufferer may feel compelled to watch the movie to alleviate the fear of missing the experience. This study can be linked to how social media can play a pivotal role in FoMO, for the reason that social media is a platform of seeing what the masses are doing and evoking a fear of missing the prescribed experience. Baumeister and Leary (1995) argued that social exclusion evokes anxiety because it is indicative of a lack of connection or belongingness to a social system.

It is also essential to explore that platforms such as Facebook, Twitter, Instagram, and LinkedIn promote attentiveness of what one has or does not have, defining one's social status. By realising what alternatives exist out there, one may feel a lack of satisfaction with their social status (Hedges, 2014). This is an analogy of how social media can be a catalyst for not only keeping up with others; but social media can be used as a means of comparing and evaluating one's life to what others are portraying to them in the social platforms (Hedges, 2014). One cannot deny that FoMO may be related to the concept of keeping up with the Joneses. This aspect of comparison will be discussed in depth at a later stage in this dissertation, when discussing the theory of social comparison processes.

Dossey (2014) argued that a pervasive cycle operates in individuals who suffer from FoMO. This cycle operates as follows: Individuals opt for social media contact to stay socially engaged, this replaces physical social engagement, and this substitution increases their feeling of loneliness and in turn isolates them further. It is this increase sense of isolation which increases the feeling of FoMO (Dossey, 2014). According to Dossey (2014) the term social media renders itself an oxymoron, because instead of promoting more social interaction, it paradoxically results in more social isolation particularly for FoMO sufferers. This is related to the findings of the second phase of the study conducted by Przybylski et al. (2013), this phase of the study revealed that individuals who reported feeling a reduced sense of connection from others, subsequently reported higher levels of FoMO as well.

Wortham (2011) contended that scrolling through the pictures and status updates of others on social media evokes a fear, which she refers to as the darker side of FoMO.

FoMO is also characterised by the increased desire to keep connected with what others are doing (Przybylski et al., 2013). One cannot deny the impact social media has on individuals, as it allows access to activities, events, and communication instantaneously. The individuals with FoMO find it particularly attractive to subscribe to social media, as a means of being well-informed with what others are doing, to establish whether they are doing enough (Przybylski et al., 2013).

People have always been concerned with their social status, however with the increased use of social media FoMO is more prevalent (White, 2013). FoMO has been associated with the number of times young people check their social media accounts. Higher frequency Facebook use has been associated with diminished wellbeing in adolescents. Specifically, increasing feelings of disconnectedness and social anxiety (Wallace, 2014). A study conducted by Kross et al. (2013) indicated that excessive Facebook use could be linked to a decline in subjective wellbeing, this includes an individual's current emotional state, as well as an individual's overall life satisfaction.

Fear of missing out has been key in understanding social engagement on social networks. The study by Przybylski et al. (2013) was not focused on a causal relationship between FoMO and social media, however there appears to be indicators that social media either causes or exacerbates FoMO. This supposition was evident in the last phase of this study which indicated that the university students, who had higher FoMO ratings, were those who used social media excessively. These students logged on to social media shortly after waking up, while having meals and even while driving (Przybylski et al., 2013).

2.3 The relationship between FoMO and Technology:

Mcluhan (1964) argued that any development in technology requires people to adapt to it, as opposed to technology adapting to the status of the world. Advancements in technology essentially alter the way society interacts. Technology has positioned itself as an architect of social relationships, in recent times (Turkle, 2011). With this new phenomenon of constant connections; comes an increased anxiety of being disconnected (Turkle, 2011). Turkle (2011) refers to this anxiety of being disconnected as a sense of panic that individuals experience from time to time.

Turkle (2011) argues that our relationship with technology can be likened to a symptom. When we refer to technology as a symptom the focus moves to the symptom, as opposed to the source of the problem. In other words, the real root of the problem is overlooked, as the emphasis is on excessive technology use (Turkle, 2011). The same could be argued about FoMO, as the symptom of FoMO is overemphasised to the point that the source of FoMO is overlooked. Social media activity can induce negative emotional states, such as loneliness and boredom. These emotional states may induce FoMO (Przybylski et al., 2013).

The era of internet usage has opened individuals to constant social stimulation through the internet. This stimulation causes the increased desire for more social stimulation through the internet. FoMO can cause smartphone users of all ages, to feel the need to take part in online discussions and to maintain contact with people which they would not otherwise (Sayrs, 2013). A recent study revealed that the action of checking to see if the individual has not missed any important information without responding, alleviates the level of FoMO the individual experiences (Sayrs, 2013).

We are in an age where mobile communication devices are an essential part of life. These devices have essentially changed the way humans live. Technology has moved in a direction where billions of people can connect anytime and anywhere real-time (Przybylski & Weinstein, 2013). "Technology reshapes the landscape of our emotional lives" (Turkle, 2011 p. 17); this quote from Shirley Turkle in her book *Alone Together* profoundly depicts how technology impacts human beings. She further argued that technology has resulted in a reduced ability to self-reflect and ultimately the well-being of the individual is compromised by the constant engagement with technology (Turkle, 2011).

The smartphone has allowed humans to fulfil greater social actions than ever before, however, human beings may not be well equipped to deal with these increased social fulfilments. The constant availability which the smartphone allows, may lead to feelings of social pressure, which could ultimately lead to anxiety and feelings of resentment. Individuals may also feel the disappointment of not being able to fulfil all the available social obligations (Sayrs, 2013). This can be related to the study conducted by

JWTIntelligence (2012) as participants expressed that constant online connection and over stimulation resulted in them feeling overwhelmed.

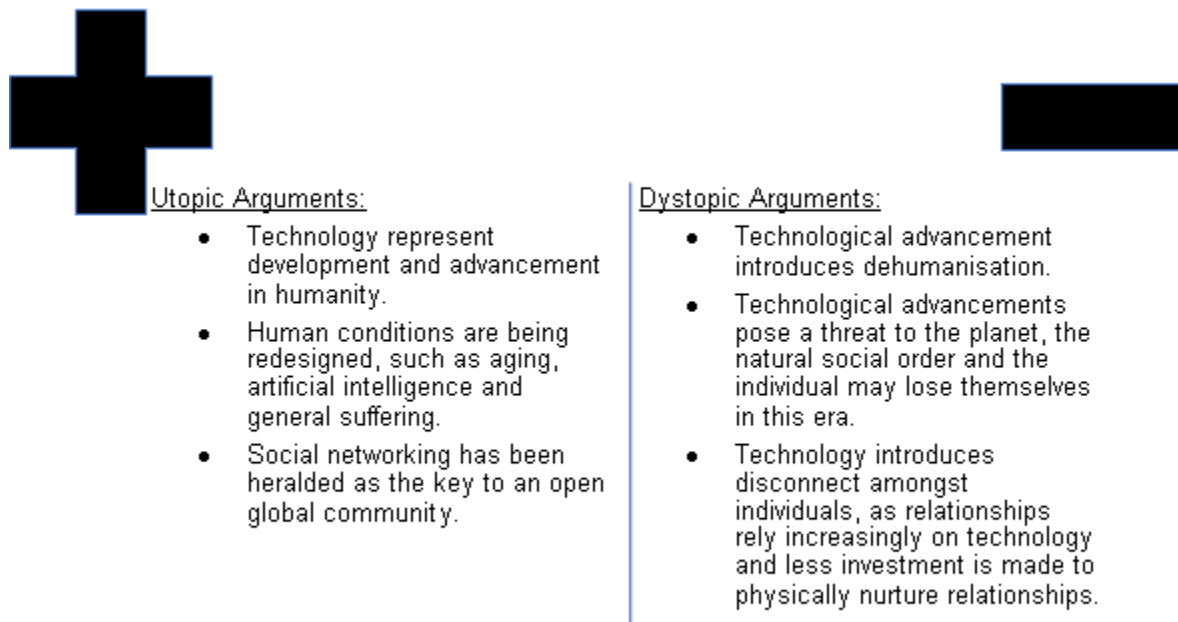
A study conducted in the United Kingdom coined the term nomophobia, which is short for no mobile phone phobia. The term nomophobia refers to the anxiety one may feel from being separated from their mobile phone (Sayrs, 2013). The main reason people keep their phones at an arm's length, is not only because they are worried that they may need to be contacted in the case of an emergency, they may also experience separation anxiety from their phones. FoMO can be attributed to the separation anxiety people experience from their phones. As they may fear missing something important when they are not near their phones (Sayrs, 2013).

A poll completed by 5000 individuals across 8 countries indicated that one in four individuals check their phones every 30 minutes, and one in every five-people checked their mobile phone every 10 minutes. The motivation for this behaviour was predominantly the anxiety of missing something superior than what they were currently doing (Gibbs, 2012). This constant need for keeping connected can result in one checking their mobile phones even in situations which are not safe, such as whilst driving (Turkle, 2011).

Grohol (2013) argued that individuals engage in this dangerous behaviour simply because the notion of being connected is more important than their own lives or safety. While the emphasis is made on the dangers of using a mobile phone whilst driving, in more recent times texting whilst walking is drawing more attention. In Australia, a young man plummeted to his death, as he walked over a short railing in a parking lot while he was texting. A young mother was saved from drowning because she fell from a pier while she was texting on her phone and walking (Dossey, 2014). These cases demonstrate how engagement in technology may cause physical harm.

Davis (2012) argued that the relationship human-beings have with technology is characterised with ambivalence. The individual is believed to be wedged in between the dialectical arguments presented below (Davis, 2012).

2.3.1 Figure 2.1



The tension between these two arguments may be said to cause the ambivalence individuals may feel about technology. Mark Zuckerberg stated the following in a letter addressed to his investors: “Our mission is to make the world more open and connected. People use Facebook to stay connected with their friends and family, to discover what is going on in the world around them, and to share and express what matters to them, to the people they care about” (Davis, 2012, p. 957). This celebratory perspective underscores the importance technology plays in social relations. On the other hand, it is argued that technology has introduced accessibility which human beings have not been exposed to before. This accessibility is contradictory as it also produces isolation, in a highly-connected environment (Turkle, 2011).

A study conducted by Davis (2012) revealed that engagement with social media is characterised with ambivalence. The participants reported to have utopic hopes about the positive aspects of technology, however these hopes are accompanied with dystopic fears. Individuals feel stifled by the technologically concentrated era, as it has become increasingly difficult to “opt-out” of social platforms (Davis, 2012). Although the option to delete social media accounts or logging off social media seem accessible, there is a

sense that one cannot escape the technologically permeated environment. Face to face interactions do not end there in most cases, as other devices are employed to maintain communication at some point. Individuals in the study conducted by Davis (2012) reported that even after disconnecting from social media accounts, for whatever reasons, they were left feeling disconnected from others, since they felt they were missing information, by not being logged on.

2.4 FoMO and Decision Making:

Grohol (2013) raised the question whether humans will ever settle for what they have without the fear of missing something better. Human decision is relative, this means that individuals do not know what they want until they see it in context. Humans don't seem to know what they want in their lives, until they compare themselves with someone who is doing something they think they should (Ariely, 2008). Humans seem to be inclined to look at themselves in terms of the context they are in. Individuals also compare options such as jobs with other jobs and intimate partners with previous intimate partners (Ariely, 2008). Ariely (2008) contends that we are wired as human beings to have the compulsion of keeping our options open.

Fear of missing out can be linked to an erosion of agency, when it comes to decision making. It can be argued that individuals may not always be conscious of what informs their decision, when it comes to FoMO induced behaviours. The individual may not be aware of whether the behaviour is motivated by what others are saying and doing. This could be the case in attending a function or purchasing a gadget because of the enticing social media hype (Dembling, 2011). The individual cannot fully account for the decision of the behaviour because it may have been cued by the influence of others.

In the study conducted by Pharma Dynamics it was discovered that 53% of participants admitted that they have had instances where they said yes to something when they felt like not doing it at all ("It's official: South Africans have FOMO," 2012). These respondents attributed this selection to the fear of missing something great by opting out. This choice for opting in when one would rather not, can lead to unintended spending, unplanned credit charges and a lack of saving ("FOMO affecting SA's wallets", 2012). One may feel

compelled to say yes because of the feeling that they may miss something great if they opt out of something. Great things are believed to rarely take place, and unsurprisingly in most cases opting in to something for a better experience does not end up paying off (Dembling, 2011).

Fear of missing out can also be linked to the immobility of not being able to decide at all. As mentioned earlier that there is an overabundance of data streaming in from social media feedings, with this increased accessibility to information comes increased options. The superfluity of choices can lead to a state of not being able to make a choice. Furthermore, when a choice is made one may experience discontentment about the choice made, in light of the other options (McKay & McKay, 2013). This state of immobilisation can inflate the feeling of FoMO, as not only is one far from choosing the perfect option from an array of choices, one is also far from the process of making an actual choice (McKay & McKay, 2013).

2.5 FoMO and Psychological Wellbeing:

The study undertaken by Przybylski et al. (2013) investigated the correlation between the level of FoMO and life satisfaction. The findings revealed that there is a negative correlation between the level of FoMO and life satisfaction. The overall life satisfaction of people with higher levels of FoMO seemed to be lower than their counterparts (Przybylski et al., 2013). This study also revealed that individuals whose psychological needs were being deprived, particularly the need for belongingness, autonomy and a sense of competence, scored higher on the FoMO rater. Furthermore, the higher the level of negative social emotional states, such as loneliness and boredom related to social media activity, the higher one experienced FoMO (Przybylski et al., 2013).

The notion of self-concept has been associated with the presentation of FoMO. Abel et al. (2016) argued that the notion of self-concept constitutes both an affective and an evaluative component. Self-concept essentially alludes to how individual's feel about themselves in general. Low self-esteem has shown to be positively correlated with high levels of anxiety (Abel et al., 2016). Abel et al. (2016) argued that in today's social media

climate it is not unusual to imagine how social media can impact one's satisfaction or dissatisfaction with their own lives.

In the latest edition of the Diagnostic and Statistical Manual of Mental Health Disorders (DSM-5), Internet use disorder is recommended for further study, which indicates that psychiatric difficulties have been noted to be related to internet use disorder (Mercola, 2012). A study conducted in China, revealed that increased internet use is linked to brain atrophy (Weng et al., 2013). FoMO can be linked to Internet use disorder symptomatology, because as stated earlier FoMO is related to increased social media activity, which can make one susceptible to addiction to the internet, as social media cannot be separated from internet use.

Online interaction was conceived as a substitute for physical contact, when physical contact seems to be impractical and less efficient. However, this mode of communication has become the most preferred mode of interaction (Turkle, 2011). Turkle (2011, p13.) refers to the Internet as the convenient "world of connectivity" which is tailored for the modern day overworked and busy lives individuals live. It is also this world which people turn to, to alleviate loneliness and to also maintain their relationships (Turkle, 2011). Technology has given individuals the opportunity to stay connected when they wish; and to disengage when they desire (Turkle, 2011).

The online mode of communication has introduced the confusion of whether you are closer to connections or not (Turkle, 2011). Constant connection has introduced the anxiety of being disconnected, and paradoxically, constant connection can be attributed to the feeling of disconnect (Turkle, 2011). The argument of being too connected to the point of disconnection can be linked to the physiological functioning of the brain. In a study conducted using time-resolved magnetic resonance imaging, it was revealed that humans have a neural based limitation in performing dual tasks (Findlay, 2014). The neural network located in the frontal lobe is responsible for being the bottle neck of information processing, and this bottleneck tendency limits one's ability to multi-task. The study also revealed that when humans attempt to complete more than one task at a time one of the tasks is compromised (Findlay, 2014). The idea that one can fully engage in one task,

whilst preoccupied by the fear that others could be having a more rewarding experience proves to be illusive.

In the study done by JWTIntelligence (2012), 83% of the respondents reported that they feel overwhelmed by the increased amount of stimulation they are exposed to. They reported feeling that there is just too much data to engage and they try to engage as much data as possible (JWTIntelligence, 2012). Technology seems to permit people some sense of control over the vast information available to them and the velocity of the pace of life. Technology offers people the illusion of more time when there does not seem to be enough time to honour all relationships or tasks (Turkle, 2011).

Technology provides the opportunity to connect with others, in a climate where face-to-face connection time is a scarce commodity. The constant connection to social media can result in people feeling inadequate about not being able to stay up to speed with constant feeds of information. Miller (2012, p. 2.) made the assertion that social media is “like kerosene of FOMO’s fire”, one can concur with this assertion that social media activity seems to have a relationship with the intensity and the presentation of FoMO and FoMO induced behaviours.

Garzberg (2015) introduced a new dynamic to FoMO as he argued that human beings have this inherent vulnerability to the pain of being left out. He argued that FoMO should be changed to PoMO (pain of missing out). He contends that the feeling of FoMO can induce a psychological pain which stems from the idea of being excluded. As per a study conducted by Lieberman (2013) this pain appears to affect the same regions of the brain as physical pain. The brain proves to have evolved to a point where threats to social connections are experienced the same way as physical pain. Research has also indicated that when an individual experiences social pain, they consequently have to deal with a negative perception of themselves (Lieberman, 2013).

2.6 FoMO Marketing:

It is interesting to see how the marketing world has evolved with the development of technology, the growth in social media and more relevant for this discussion the phenomenon of FoMO. This point came to the researcher’s attention while browsing

through the Australian Start the Adventure Travel (STA Travel) website. The page starts by describing FoMO as debilitating and contagious, it further predicts that 1 in 4 people will be affected by FoMO in the next 18 months. Moreover, the website stated that 70% of Australian youth report that they have suffered from FoMO, at some point ("What is FOMO", 2015). The causes of FoMO are listed on the website, namely fashion, travelling, events and food. The symptoms of FoMO are also listed, such as social media activity, feelings of panicking, the feeling of irritability which is sparked by jealousy of what others are doing and lastly compulsive texting. The best thing for FoMO sufferers according to this travelling company is to embark on various travelling adventures ("What is FOMO", 2015). FoMO was employed by this company as a marketing tool, and their product (travel packages) were pitched to remedy FoMO.

The managing director of 1Life Laurence Hillman, reported that "FoMO is going into a dangerous territory in South Africa", because of the lack of financial literacy in the country and the huge gap between the rich and the poor ("Fear of missing out spells danger", 2014). Hillman further argues that FoMO makes people live beyond their means and the definitions of needs and wants become nebulous ("Fear of missing out spells danger", 2014). Individuals are spending more than they should because they are trying to keep up with the Joneses, as they look to their peers for guidance on what is the latest item they should purchase, and the activities which they should partake in.

2.7 What Induces FoMO?

Fear of missing out may have been a social phenomenon which has always existed. However, it is more prevalent, due to the real-time communication and more instant access to the activities occurring in the lives of others. Through social media individuals are exposed to options which they would not have otherwise been exposed to (JWTIntelligence, 2012). It is important to note that the acronym FoMO has more to it than its common amusing use. It is one of the new occurrences of the age we are living in (JWTIntelligence, 2012).

People are making others more aware of their location and what activities they may be engaging in (JWTIntelligence, 2012). A hashtag is a word which is preceded by the hash

(#) sign; it is used to identify a trending topic or event (Van Hurk, 2013). The hashtag gives the people attending an event the ability to post and monitor information being posted about the event attended. For the people absent from the event the hashtag allows them to follow the event and get information about what is happening at that particular event (Van Hurk, 2013). These hashtags may catalyse FoMO as the individuals absent from the event can follow the exact occurrences at the event real-time.

Dembling (2011) made an interesting analogy of how others can plant the seed of FoMO in interactions. She related instances where friends question one's decision of leaving an event, by questioning why an individual wants to leave a social gathering earlier than others (Dembling, 2011). This question implies that there is something of greater importance that will take place in the individual's absence, and questioning whether the individual wants to miss a moment of greatness, which may possibly occur in their absence (Dembling, 2011). Friends can plant the FoMO seed by such assertions, as one may feel compelled to stay and witness the possibility of something greater. These questions may also evoke a sense of uncertainty, as one may start to question their decision to leave a social gathering at that chosen time.

2.8 Theory of Social Comparison Processes:

The Theory of Social Comparison processes contends that self-evaluation can only be achieved by comparison with people. Self-evaluation is argued to be the drive that motivates people to belong to groups and to associate with other people (Festinger, 1954). The adequacy of one's opinions and appropriateness of one's performance on important tasks in relation to others are some of the benefits an individual attains from interactions with others. These interactions with others result in a sense of satisfaction in oneself because of the act of comparison. This need for comparing oneself with others is an important contributing factor to making the human being a social being (Festinger, 1954).

People tend to gravitate to groups which hold the same opinions and have the same abilities, according to their judgement (Festinger, 1954). Hedges (2014) related the aspect of comparison to FoMO, as there is an element of comparison when one views

what others are doing in relation to oneself. This argument can be further extended to the supposition that individuals evaluate their sense of adequacy by comparing themselves to others, this could be true for social media use.

A study conducted using undergraduate participants indicated that the students who seemed to use Facebook longer, compared their lives more with that of others. Furthermore, they reported that others were happier than they were and they felt that their lives were better than theirs (Alt, 2015). It also appeared the students who added friends on Facebook whom they did not know at all, seemed to experience these feelings of inferiority more severely (Alt, 2015).

2.9 Theory of Human Motivation:

According to Maslow's Theory of Motivation the most basic primary need that human beings have is the physiological need. The term homeostasis refers to the human body's inherently automatic attempts to maintain a normal state in the body, this extends to the balance in minerals, chemicals, water content, oxygen, and temperature, amongst many more physiological requirements for stability. It is this need for homeostasis which informs appetite, as an individual who lacks certain elements may develop an appetite for food items which will meet this need (Maslow, 1943).

Maslow (1943) argued that it is through physiological needs and the compensatory behaviour which serves these needs that the channel for all the other needs is opened. Physiological needs may seem as isolated from all the other needs, however they are not completely isolated, as they form the basis for the other needs. Maslow (1943, p. 373) further argued that an individual who is lacking "food, safety, love and self-esteem" may in fact experience the hunger for food more intensely than their counterparts. However, when the physiological needs are satisfied, other higher order needs emerge.

It is these needs as opposed to the physiological needs which motivate an individual's behaviour. When these new higher order needs are met then new higher order needs emerge, this validates the argument that human needs are organised by a hierarchy which depends on the needs level of supremacy (Maslow, 1943). If the physiological needs have been relatively gratified, a new set of higher order needs emerge, namely

safety needs. These needs have to do with a general need to be safe from harm. These needs have to do with the physical and emotional need for safety from harm, as well as a healthy need for stability with life events. This also includes the need for financial stability.

When both physiological and the safety needs are met, then the needs for love, affection, and belongingness emerge. It is at this point that an individual feels the absence of significant relationships (e.g. friends, children or significant other) (Maslow, 1943). The individual will have a need for more affectionate relations, as opposed to those fulfilling safety and physiological needs. A need for a place in the group emerges, and the individual will strive with greater intensity to meet this goal. This need can be linked to FoMO, since the individual perceives that social media and constant checking of social media accounts serves a way of maintaining meaningful relationships. The individual may believe that they need to engage in activities which others are doing, in order to belong, and possibly also securing their position within a group.

According to Maslow (1943) the inhibition of these needs may result in maladaptive behaviour and psychopathology. These needs also involve the giving and the receiving of love. Lieberman (2013) argued that a brain is wired to connect with other people. The feeling of perceived disconnect has been argued to cause negative emotions, such as dysphoria and irritability. Social media can be turned to in times of strained social relationships. As it serves as an outlet for the expression of the frustration of relationship needs which are not being met (Przybylski et al., 2013).

Self-esteem refers to the need for a stable high evaluation of self and the esteem of others as well. Self-esteem is based on the individual's abilities; achievements and perceived respect from other people. These needs may be divided into two elements. Firstly, there is a need for strength, autonomy, personal achievements and liberty. This element is based on the individual's subjective well-being. The second element is the need for recognition, the attention and appreciation of others and prestige. This element is based on relational opinions (Maslow, 1943).

The satisfaction of the self-esteem needs leads to increased confidence, an increased sense of adequacy and feeling like one has a purpose in the world. The deprivation of

these needs results in one feeling inferior and this results in the discouragement of these desires, or compensatory neuroticism (Maslow, 1943). Considering this argument, one cannot help but wonder whether the experience of FoMO is related to a sense of discontentment, because there is a constant challenge of one's position. People who suffer from FoMO are said to always question their position and this constant challenge to their own life position, may result in the need for self-esteem being unmet.

Maslow (1943) postulated that even when all the needs stated earlier are satisfied, a new discontentment may arise, if the individual is not engaging in something which they feel they are best suited for. This need is referred to as the need to self-actualise. This need has a lot to do with the need for self-fulfilment. According to Maslow (1943, p. 382) the need to self-actualise is characterised by a "desire to become more than what one is, and to become everything that one is capable of becoming". This can be likened to FoMO, in the sense that individual's may experience anxiety that they may be missing various experiences, and they should be doing more with their lives. One could argue that some individuals may experience FoMO from not having certain items or not engaging in certain activities, because of the inherent desire to be more than what one is.

2.10 Self Determination Theory:

The Self Determination Theory is a macro theory of human motivation, and it makes the argument that effective self-regulation and psychological wellbeing depend on the satisfaction of three psychological needs which are: competence, autonomy, and relatedness (Przybylski et al., 2013). Competence refers to one's sense of accountability when it comes to successful execution of tasks (Gagne & Deci, 2005). Autonomy refers to the level in which an individual feels in charge of their life and their personal drive. Relatedness refers to the feeling of being close and connected to others (Przybylski et al., 2013).

Research across various domains indicates that the satisfaction of these three needs results in proactive and effective behavioural regulation. Fear of missing out can be understood in terms of it being a self-regulatory crisis, which arises from these needs not being adequately met (Przybylski et al., 2013). An individual whose needs are not being

met may revert to social media as a way of harnessing relationships and acquiring deeper connections, this action is more direct. On the other hand, an indirect way to alleviate a lack of need satisfaction is through FoMO being a mediator, which links the dissatisfied need and social media engagement (Przybylski et al., 2013).

2.11 Existentialism:

Viktor Frankl (2000) coined the term hyper-intention, which refers to the emphasis which individuals place on certain aspects or achievements, and it is this emphasis that causes preoccupations and apprehensions. In other words, people get overly concerned with the fear of missing an awesome experience to the point that they develop symptoms related to this. Frankl (2000) believed it is this fear that leads to a state of not being fully present, and missing the present moment. Frankl (2000) believed it is this state of fear that tends to bring out what one is afraid of, and this dynamic causes a vicious cycle. This can relate to FoMO as individuals who are self-proclaimed FoMO sufferers experience this fear of missing out to the point that they miss whatever activity they are currently busy with.

The concept of meaning in today's times is a topic which is characterised by frustration. In logo therapy, there is the concept of existential frustration, which refers to the feeling of futility experienced by individuals. This feeling of futility is associated with the frustration related to making meaning of their experiences or their lives. The concept of existential vacuum coined by Viktor Frankl refers to the feeling of meaninglessness and emptiness which humans may experience (Frankl, 1972).

Frankl (1972) contended that people engage in various types of behaviours to fill this existential vacuum. FoMO can be related to what Frankl (1972) names neurotic patterns which are aimed at filling the vacuum. This cycle can be associated with how individuals opt for social media as a preferred mode of connecting with others and the paradoxical loneliness which they experience because of lack of physical contact (Dossey, 2014). Frankl (1972) further asserted that the idea of filling this vacuum is illusive, and nothing an individual does will ever be enough to fill this void of meaninglessness (Frankl, 1972).

Frankl (2000) argued that the existential vacuum phenomenon is prevalent in Africa. He argued that individuals are suffering from a lack of life content as opposed to clinical

symptomatology (Frankl, 2000). Frankl (1972) believed that instinct no longer motivates human beings when it comes to behaviour, nor is their behaviour motivated by traditions and values. Frankl (1972) held that humans are controlled by conformity which means that the motive for behaviour is induced by what others are doing, or totalitarianism which means motive for behaviour is simply sanctioned by what other people want.

In addition to the above stated effects of the existential vacuum, another important concept to discuss is existential frustration, which arises when the desire for meaning is frustrated. Existential frustration is argued not to be pathological, as people's despair over meaning is a spiritual discontentment and should not be pathologized (Frankl, 1972). To underscore the relevance of the existential vacuum in society; a study was conducted with a sample comprising of European students. The results indicated that 25% of the students reported to be suffering from the phenomenon of the existential vacuum. Similarly, research conducted in America indicated that 60 % of the participants reported experiencing an existential vacuum (Frankl, 2000).

The argument of the mass neurotic triad stipulates that depression, addiction and aggression can be the effect of being in a state of meaninglessness (Frankl, 2000). The theme of depression can be linked to suicide, and it is evident that suicide is a prevalent issue amongst the youth (Frankl, 2000). Suicide can be associated with existential frustration, which can be linked to the experience of meaninglessness. This was proven by a study conducted at Idaho State University, the study revealed that 85% of the students who had made serious suicide attempts; reported that the main reason for the suicide attempts was the experience of meaninglessness in their lives (Frankl, 2000).

It is important to note that these students reported being socially active, they also were doing well academically and they were in good physical health (Frankl, 2000). With regards to FoMO, Wortham (2011) argued that FoMO can be linked to a feeling of dysphoria or even depression, as it constantly undermines one's decision, and it evokes uncertainty whether one is doing what they should be or not. Research has substantiated that a dysphoric mood may also be the underlying motive for FoMO (Przybylski et al., 2013).

Frankl (2000) attributes this increase in the prevalence of meaninglessness to the exposure to indoctrinations which are reductionist in nature. He argued that the definition of a human being has been reduced to the point that exacerbates the existential vacuum in society. The concept of existential vacuum can be linked to the concept of FoMO, since self-proclaimed FoMO sufferers want to do things because other people are doing them or they do things other people prescribe to them (such as purchasing the next greatest item based on the opinions of others). The individual's sense of agency becomes renounced. Furthermore, social interactions have been reduced to texting, social media engagement or phone calls. This could be the reductionist argument which Frankl (2000) was making, that innate human attributes are being undermined in these present times. As the need for connectivity is being redefined, with less emphasis being on physical time spent connecting with others.

2.12 Conclusion:

Discourse about FoMO without discussing the impact of social media on human behaviour would be futile. Social media proves to be a major agent in the presentation of FoMO. The accessibility to more information about what others are doing has become a major driver in FoMO related behaviours. This increased accessibility to the lives of others through social media, gives the illusion of being connected. However, the study conducted by Przybylski et al. (2013) proved that the idea of increased connectedness through social media is illusive, as the results indicated that the more one engaged in social media the more disconnected they felt from others.

Our engagement with technology demonstrates that as much as it has opened more communication channels and increased opportunity for connecting with others, technology has adverse effects on humans. Technology has become the bridge through which we gain access to social media. This engagement with technology may induce negative feelings, such as feelings of inadequacy because of the increased stimulation which results in increased commitments. There is also an aspect of physical danger due to our engagement with technology.

According to Ariely (2008) humans are inclined to keep their options open when it comes to decision making. Fear of missing out can be characterised with a lack of confidence in a person's decision making ability. As there is an uncertainty about whether one should be engaging in the current activity or they should be seeking a greater experience. Because of the impact of referring to what others are doing consistently, one can argue that the agency when it comes to decision making becomes nebulous.

In terms of psychological wellbeing it is essential to refer to the study by Przybylski et al. (2013) which proved that there is a negative correlation between life satisfaction and the levels of FoMO. The inclusion of Internet Use Disorder as a condition recommended for further study in the Diagnostic and Statistical Manual of Mental Disorders (5th ed.), is an indication that internet related conditions are being noticed as significant areas which require further research, in order to understand how technology impacts human behaviour. The concept of social comparison proves to be relevant in this discussion as the motive for FoMO related behaviour, as an individual evaluates themselves by referring to what others are doing. One can argue that this process of social comparison may be linked to FoMO and further suppose that the more one compares themselves to others the greater the FoMO.

When looking at the theory of human motivation it is evident according to Maslow (1943) that human beings have an innate need for love, affection, and belongingness, once the lower order needs have been met (such as physiological and safety needs). This need for belongingness to a group elicits behaviour which will satisfy this need; relating this need to FoMO, one can suppose that FoMO serves as an aid to stay connected with others and being abreast with what others are doing. After the needs for affection and belongingness are met, then emerges the need for self-esteem. This need requires one to achieve an increased level of self-confidence. One can argue that individuals who suffer the most from FoMO may be trying to satisfy this need by referring to what others are doing, to establish if they are doing enough in their own lives.

On the point of needs not being adequately met, social determination theory asserts that failure to meet needs leads to a state of psychological dysregulation. According to Przybylski et al. (2013), FoMO serves as a mediator between unmet needs and social

media. Frankl (2000) argued that it is important to explore the concept of meaninglessness in the lives of distressed individuals. He asserted that this meaninglessness influences people to engage in behaviours which gives the illusion that they are filling this existential vacuum they have. However, these behaviours do not actually fill this void at all, instead they exacerbate the feeling of futility.

Chapter 3: Research Design

3.1 Introduction:

This chapter will discuss the methodology which the researcher deemed suitable for this type of study. This discussion will include an elaboration of the research approach and a detailed discussion of the methodology used in this study. The literature review and the research topic discussed earlier inform the research design and the methodology used in this study.

The key focus of the study will be discussed first. Subsequently, the research design of the study will be discussed, and its applicability to the objectives of the study will be viewed. The sample size required for the study, and the sampling techniques used will then be stated. The instrument used in this study will be an online survey, and the rationale of using an online questionnaire will be explained. The mode through which the data was collected will be examined. Points pertaining to the reliability and validity of the study will be discussed. The Satisfaction with Life (SWL) Questionnaire will be discussed and its psychometric properties will be examined. The FoMO questionnaire will also be examined and information about the development of the questionnaire will be discussed. Lastly, the ethical considerations of the study will be stated.

3.2 Key focus of the Study:

One cannot ignore that the technological climate which we are living in currently, has largely changed the way in which individuals perceive themselves and others. One can even go further and say that the identities and behaviours of individuals are impacted by the technological era which we are in. The online accessibility of one's personal data and that of others, proves to have a paradoxical component. As stated in the earlier chapters of this paper, social media is effective in increasing connectedness with others, however studies have also indicated that it can adversely impact one's emotional state (Przybylski et al. 2013; Wortham, 2011 & JWT Marketing Communications, 2011, 2012). As such, the key focus of this study was to investigate the relationship between the level of FoMO

experienced by individuals and an individual's subjective satisfaction with their current life.

3.3 Research design:

According to Terre Blanche, Durrheim, and Painter (2006) the research design of a study refers to the protocol which governs how the study will be executed. The research design governs the mode in which data will be collected and analysed for a study. Mouton and Marais (1994) stated that the design needs to fit with the aims of the research and address practical considerations of the research. It is the researcher's opinion that the data which was collected in this study fits the aim of the research as the study aimed to quantitatively investigate the relationship between FoMO and life satisfaction. The practicalities involved in the collection of the data were deliberated by the researcher. As mentioned earlier, the mode of collecting data and the instruments which were used were considered in light of the context of social media, since FoMO is largely connected to social media use.

3.4 Research Approach:

The research approach which the researcher chose to use is a quantitative research approach. The researcher aimed to collect numerical data and use statistical methods to analyse the data collected (Terre Blanche et al., 2006). This design enabled the researcher to investigate the quantitative relationships among the variables (Terre Blanche et al., 2006).

3.5 Sample Size:

The aim of this study was to complete a mini dissertation as part of the requirements for a Masters in Clinical Psychology degree. The researcher needed to be cognisant of this when determining the sample size for the study. An a priori power analysis was performed using a power of .80, revealed that a sample size of 128 participants was needed to get an effect size of 0.25 (Faul, Erdfelder, Lang, & Buchner, 2007). The researcher aimed to use this calculation as a guideline.

3.6 Sampling:

The researcher used non-probability sampling for this study. Non-probability sampling does not use any statistical methods to randomly select participants (Terre Blanche et al., 2006). The reason for this type of sampling is because there is no epidemiological data of FoMO as a construct, in South Africa. Including prevalence thereof, thus the relevant parameters of FoMO as a construct remain unknown. However purposive sampling was also used in the study, since all the volunteers were screened by age and nationality (Terre Blanche et al., 2006).

The participants were screened on the following:

- (a) age was a screening item, as the researcher was seeking participants over the age of 18 years
- (b) Only South African citizens were allowed to partake in the research
- (c) participants were required to have at least one social media account to access the online survey.

3.7 Data sources:

The researcher chose to use survey data. This data was collected through an online survey distribution tool named Qualtrics. The results were downloaded from Qualtrics and exported into an excel spreadsheet, which facilitated the coding and categorizing process (Sherry, Thomas & Hong Chui, 2010). In addition to the scale items, questions to investigate the sample's demographic characteristics were included. These questions included gender, age, province in South Africa and how frequently the individual experiences FoMO.

3.8 Administration of Instruments:

The survey contained two scales, namely the Satisfaction With Life (SWL) scale (Diener, Emmons, Larsen and Griffin, 1985), and the Fear of Missing Out (FoMO) scale (Przybylski et al., 2013). Both these scales contain Likert scale items. A Likert scale is a psychometric scale which consist of categories which the respondent can choose, to

indicate their standing on a construct (Nemoto & Beglar, 2014). The advantages of using the Likert scale is that firstly, it allowed the researcher to gather information efficiently from a large number of participants. Secondly, Likert scales have proved to be reliable when it comes to personal capability estimations. Lastly the validity of the interpretations made from data collected from the scale can be obtained through generating a few means (Nemoto & Beglar, 2014).

3.9 Data collection techniques:

The researcher aimed to send the link to the questionnaire through social media platforms. The researcher approached individuals with a large following to retweet or post the link to the survey and encouraged their followers, who identified as self-proclaimed FoMO sufferers to complete the survey. The wording for the social media post was provided to them to ensure there are no ethical breaches. The text directing individuals to the link read as follows:

Do you suffer from FoMO? Do not miss this opportunity to participate in a research study on FoMO.



The questionnaire only takes 5 minutes to complete and the information collected is strictly confidential. Please note that you must be above the age of 18 to participate in this survey.

Go on the link, below!

https://unisapsychology.qualtrics.com/SE/?SID=SV_24UD1A4NvVZiFyB

3.10 Reliability:

Reliability refers to the extent to which the results from a study can be produced in a different context with a different sample (Terre Blanche et al., 2006). The scales used in this study are recognised scales, which contained standardised administration procedures across contexts. The Cronbach's Alpha coefficient is a measure used to evaluate the internal consistency of the items included in an instrument. The Cronbach's Alpha ranges from a score of 0 to 1, a score close to 0 indicates that the items in the scale have no internal consistency. The highest internal consistency score which can be obtained is 1, which indicates that the items of an instrument are internally consistent. Therefore, the closer the consistency score is to 1, the more internally consistent the

items prove to be, the closer the score is to 0 the less internally consistent the items seem to be (Terre Blanche et al., 2006). The Cronbach's Alpha was used to determine the internal consistency of the items comprising the scales.

3.11 Validity:

Construct validity of a measure refers to the extent to which the items in the instrument measure the construct they are intended to measure (Terre Blanche et al., 2006). Studies have been conducted to investigate the construct validity of the scales used in this study, and their results prove to be satisfactory, these results will be discussed later in the chapter. Theoretical validity refers to the extent to which a study is rooted in the key theoretical concepts which aim to explain the significant aspects of the construct (Terre Blanche et al., 2006). The literature review chapter aimed to form sound construct validity; by reviewing the literature which is related to the constructs being measured in the study.

The internal validity of a study relates to how much a study provides valid and accurate results about the phenomena it aims to explain (Terre Blanche et al., 2006). The scales which were administered in this study, have standardised questions, and the text used to direct individuals to the study was also standardised. Furthermore, the researcher is urged to be cognisant of the alternative factors that could be responsible for the results (Terre Blanche et al., 2006). The researcher considered other possible explanations for the results when interpreting the results from the study. The validity and reliability of the individual scales included in this study, will be further discussed later in this chapter.

3.12 Rationale for Using an Online Questionnaire:

There has been a tremendous increase in internet usage, and increased communication through using technology as a medium (Wright & Hinson, 2009). In light of this increase in internet usage, it is essential to mention the report compiled by We Are Social (2015) which indicated that there are 24.9 million internet users in South Africa as at January 2015. Considering the increasing growth in internet usage and how FoMO is associated with social media use, the researcher opted for an online questionnaire, and circulated the questionnaire through social media.

Furthermore, the researcher chose to use an online questionnaire to reach a large number of participants in a time efficient manner, as the online survey allowed the researcher to access a large sample size in a shorter amount of time. The online questionnaire also proved to be a cost-effective mode of gathering data, as printing costs were not incurred in the data collection phase of the process. The researcher also considered that the online survey may be convenient for participants as they could complete the questionnaire whenever it suited them and in the convenience of their own environment.

3.13 The Satisfaction with Life Scale:

This section will discuss the development of the SWL scale, the reason the scale was developed, the contents of the scale, method of administration, the scale's validity, and reliability; as well as the rationale for including the scale in the study.

The instructions of the scale read as follows:

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

	Strongly agree 7	Agree 7	Slightly agree 5	Neither agree nor disagree 4	Slightly disagree 3	Disagree 2	Strongly disagree 1
<i>In most ways my life is close to my ideal.</i>							
<i>The conditions of my life are excellent.</i>							
<i>I am satisfied with my life.</i>							
<i>So far I have gotten the important things I want in life.</i>							
<i>If I could live my life over, I would change almost nothing.</i>							

In terms of the scoring the total scores of the items should be calculated, and the following benchmarks are used to establish how the individual fared.

Total Score Banding	Interpretation
31 – 35	Extremely satisfied
26 – 30	Satisfied
21 – 25	Slightly satisfied
20	Neutral
15 – 19	Slightly dissatisfied
10 – 14	Dissatisfied
5 - 9	Extremely dissatisfied

Source: Pavot, Diener, Colvin, & Sandvik, 1991

3.13.1 Development:

The SWL scale was developed by Diener, Emmons, Larsen and Griffin in the United States of America in 1985 (Diener et. al., 1985). The scale was developed to assess an individual's subjective satisfaction with their entire life, through a judgemental process (Pavot et al., 1991).

3.13.2 Rationale for Development:

Well-being is argued to consist of two components, an emotional component and a cognitive or judgemental process. It is argued that the judgemental component of wellbeing reveals one's satisfaction with their life (Pavot et al., 1991). There has been a great deal of focus on the emotional component of wellbeing, however the same cannot be said about the cognitive process of wellbeing. The SWL scale was developed to assess the judgemental aspect of wellbeing. Life satisfaction according to the scale comprises of a cognitive judgemental process, and it is not limited to satisfaction in

specific spheres of life, such as health, socio economic class or material possessions (Arrindell, Heesink & Feiji, 1999). In summation life satisfaction, can be viewed as the global assessment of the quality of an individual's life. The process of judgement constitutes comparing one's circumstances to what is considered ideal standards (Arrindell et al., 1999).

3.13.3 Content:

The SWL scale comprises of 5 items, and each item can receive a score ranging from 1 to 7. Upon completion of the questionnaire, individual item scores are added to obtain a composite score for everyone. The range of overall scores can be from 5 (which indicates low satisfaction with life) to 35 (which indicates a high life satisfaction). The study conducted by Diener et al. (1985) indicated that the mean of the scale is 23.5 with a standard deviation of 6.43, in the sample they used.

3.13.4 Validity and Reliability:

The normative data analysed from the administration of the scale indicated good convergent validity, with scales which were developed to assess the construct of life satisfaction. The scale also indicated temporal stability of 0.54 over 4 years (Pavot et al., 1991). The scale also showed discriminant validity from scales which measure the emotional component of wellbeing (Pavot et al., 1991). Studies on the Portuguese version of the scale indicated that the items in the scale showed high factor loadings to life satisfaction and the study also revealed that the scale has high reliability. Various studies have indicated that both socio economic status and education level do influence an individual's subjective satisfaction with life (Warr & Payne, 1982; Cantril, 1965; Campbell, 1981; Palmore, 1979). The researcher was cognisant of these findings when interpreting the results from the scale.

3.13.5 Rational for Inclusion:

This instrument was included in the study because it assesses the independent variable of the study, namely satisfaction with life. Various studies have been conducted to assess the applicability of the SWL scale to various cultural and age groups, and it seems to be

one of the more culturally apt scale. Although, differences between various groups have been noted (Arrindell et al., 1999). The scale comprises of 5 items which measure satisfaction with life, the researcher also considered that it would not be time-consuming to complete the questions.

3.14 The Fear of Missing out scale:

This section will discuss the development of the FoMO scale (Przybylski et al., 2013), the reason the scale was developed, the contents of the scale, method of administration. The scale's validity, and reliability will be examined, as well as the rationale for including the scale in the study.

The instructions of the scale read as follows:

Below is a collection of statements about your everyday experience. Using the scale provided please indicate how true each statement is of your general experiences. Please answer according to what really reflects your experiences rather than what you think your experiences should be. Please treat each item separately from every other item.

	Not at all true of me	1	Slightly true of me	2	Moderately true of me	3	Very true of me	4	Extremely true of me	5
<i>I fear others have more rewarding experiences than me.</i>										
<i>I fear my friends have more rewarding experiences than me.</i>										
<i>I get worried when I find out my friends are having fun without me.</i>										
<i>I get anxious when I don't know what my friends are up to.</i>										
<i>It is important that I understand my friends "in jokes."</i>										
<i>Sometimes, I wonder if I spend too much time keeping up with what is going on.</i>										
<i>It bothers me when I miss an opportunity to meet up with friends.</i>										

When I have a good time, it is important for me to share the details online (e.g. updating status).

When I miss out on a planned get-together it bothers me.

When I go on vacation, I continue to keep tabs on what my friends are doing.

Source: Przybylski et al., 2013

In terms of the scoring, a total of the item scores should be added, and the average should be calculated to provide a composite measure (Przybylski et al., 2013).

3.14.1 Development:

This scale was compiled by Przybylski et al. (2013) in their study of motivational, emotional, and behavioural correlates of FoMO. This study was conducted in the United Kingdom. The purpose of the items in the scale is to assess the elements of FoMO and their various magnitude. This self-report scale was designed to reduce the level of participant burden, but also maximise the data collection (Przybylski et al., 2013).

3.14.2 Contents:

The questionnaire was reduced to 10 items from the initial 32 items, by using factor analysis and an item response theory analysis through PARSCALE (Przybylski et al., 2013). The items in the questionnaire are based on the level of fears, worries and anxieties associated with being disconnected from various aspects of social interactions (e.g. events, conversations, and experiences) (Przybylski et al., 2013). The final 10 items which were included in the scale, are representative of the FoMO continuum and allow the detection of individual differences between respondents (Przybylski et al., 2013).

3.14.3 Validity and Reliability:

The FoMO Scale was the first scale developed to measure FoMO as a construct (Przybylski et al., 2013). Przybylski et al. (2013) undertook an elaborative process of validating the questionnaire. A study conducted by Al-Menayes (2016) investigated the

internal consistency of the FoMO scale, a factor analysis of the items was conducted with Varimax rotation (Al-Menayes, 2016). The results from this study revealed that the items of the scale showed to be suitable for analysis, as they appeared to be internally consistent. It is important to mention that this study was conducted on an Arabic translation of the FoMO questionnaire. The study also revealed that the scale has concurrent validity properties, as it yielded a positive correlation with an instrument that measured social media usage (Al-Menayes, 2016).

3.14.4 Rational for Inclusion:

The FoMO questionnaire measures the amount of FoMO an individual experiences. This scale allowed the researcher to rate the intensity of the FoMO the participants experience. As such, this enabled the researcher to analyse the relationship between the individual's life satisfaction and the level of FoMO the individual experiences.

3.15 Data analysis and interpretation:

Statistical Program for Social Sciences (SPSS, 2003) was used to compute the data obtained from the study. A regression analysis was conducted to establish a relationship between an independent variable and the dependent variable. The study aimed to test the relationship between FoMO (which is the dependent variable) and the level of discontentment of proclaimed sufferers (independent variable) (Terre Blanche et al., 2006). The causal effects of one variable on another was also examined in the analysis. A simple regression analysis was used to analyse the data from the study, since the study restricts its attention to one explanatory variable (Terre Blanche et al., 2006).

The tentative hypothesis of this study was that there is a negative relationship between the level of FoMO, and the level of subjective satisfaction with life. The researcher further aimed to address the following research questions:

- Which social media platforms are popularly used in South Africa?
- What is the prevalence of FoMO in the sample?
- Is there a statistically significant difference in how the research sample fared and the hypothesised population mean?

- What is the nature of the statistical relationship between satisfaction with life and FoMO in the South African context?

Data on the level of FoMO participants experience was be gathered through the FoMO scale and data about an individual's satisfaction with their life was collected through the SWL scale. The researcher also computed descriptive statistics. These descriptive statistics constitute of the internal consistency of the items of each scale. The rationale of this was to investigate the reliability of the data used. The researcher also reported on the minimum and maximum scores obtained on both scales, the means, and the standard deviations.

Correlational statistics were reported on. A scatter diagram was utilised to visually analyse how subjective satisfaction with life is associated with the level of FoMO experienced. This enabled the researcher to examine the extent to which additional noise factors affected the relationship between the two variables (Terre Blanche et al., 2006). A non-linear association of the two variables will give an indication that there is no relationship between the variables. A negative slope will indicate when one variable increases the other decreases. A positive slope indicates that when one variable increases the other increases as well (Terre Blanche et al., 2006). Pearson's correlation coefficient (r) will be used to establish the strength of the relationship between the two continuous variables (FoMO and SWL).

3.16 Ethical considerations:

As with any good research ethical considerations need to be applied to ensure the welfare of the participants. Ethical clearance to conduct this research was obtained from the Department of Psychology at the University of South Africa in February 2015. The philosophical ethical principles governing this research study are as follows:

- Autonomy and respect for the dignity of persons – this principle refers to the voluntary acceptance of participants to partake in the research. Furthermore, the protection of the participant's identities is also imperative for this principle.
- Nonmalificence – this principle upholds that no harm befalls the participants directly or indirectly because of partaking in research.

- Beneficence – this principle refers to the extent at which research is used to benefit the participants through the knowledge gained from the research findings (Terre Blanche et al., 2006)

3.17 Confidentiality:

It is imperative that the identity of a community be protected throughout a research study (Terre Blanche et al., 2006). The participant's right to confidentiality was respected in this study, as such personal information and results will not be shared with anyone apart from the researcher's statistician, who signed a confidentiality clause regarding the sharing of participant information.

3.18 Informed consent:

The consent form serves the function of giving the participant the necessary information with regards to the research, it details the participant competence in the research, as well as informing the participants of the voluntary nature of their participation and it essentially formalizes the consent of participation (Terre Blanche et al., 2006).

Participants in this research received a consent form stating the aim and nature of the research study and their role in the study. The consent form was written in plain English to ensure that the participants understood the content thereof. They were required to select the option to participate in the study, since the consent form was presented to them online.

3.19 Provision of debriefing, counselling, and additional information:

Research should address questions relevant in a society and should be of value for that society. The research should clearly state who the beneficiaries of the research are, and how each participant may benefit from the research (Terre Blanche et al., 2006). For the reason that the participants completed the questionnaire online, no debriefing was provided. However, if it were indicated, participants would have been referred to local resources/persons should intervention have been deemed necessary. Furthermore, the researcher requested the email addresses of the participants to email them a summary

of the overall research findings, once she has submitted her dissertation. This is to ensure that the participants gain knowledge from the research.

Information on ethical considerations was provided so the participants know their rights in the study. Foxcroft and Roodt (2009) stated a few of the following rights:

- The right to be informed about their rights.
- The right to withdraw from the study at any point.
- The right to be assessed with measures that meet the professional standards.
- The right to refuse to participate in the study.
- The right to know the use of the results

3.20 Conclusion:

The study aimed to investigate whether FoMO (which has been associated with social media activity) has a negative relationship with one's life satisfaction. Studies have revealed that the increased connectedness social media aims to provide, negatively impacts and individual's emotional state. Studies have also indicated that there is an increase in the number of social media activity within the South African context. Since FoMO has been associated with social media, the researcher decided to use an online questionnaire which was accessible to individuals through social media.

The questionnaire seemed to be an efficient tool to obtain access to a large participation sample in a time-efficient manner. The SWL questionnaire was developed in 1985 by Diener et al. The questionnaire was developed to assess life satisfaction by using items which require a cognitive judgemental process, without focus on particular spheres of an individual's life (Diener et al., 1985). The FoMO questionnaire was recently developed by Przybylski et al. in 2013. The questionnaire aims to measure the presentation of FoMO, the items are based on a trait theory analysis.

The survey was distributed through Qualtrics, which is an online survey tool. Both the FoMO and the SWL questionnaires were included in the instruments administered to the

participants and the participant's demographic data was collected as well. The survey was circulated through social media, using standardised text which directed interested participants to the link. The study used purposive sampling to screen and ensure participants met the parameters for the study. Simple regression statistics will be conducted to analyse the data collected. Descriptive and correlational statistics will be reported in the study. The welfare of the participants was ensured by adhering to strict ethical principles.

Chapter 4: Results and Interpretation

4.1 Introduction:

This section will firstly discuss the profile of the sample used in the study, then proceed to report on the reliability (internal consistency) of the scales which were used. The findings of the study will be reported thereafter. The researcher will then report on the descriptive statistics obtained from the gathered data. Inferential statistics will be reported thereafter; and lastly correlation statistics will be reported as well.

4.2 Biographical Profile of Sample:

A total of 141 participants started the online questionnaire, however due to incomplete entries, 36 entries had to be removed from the data set. The data which was used for analysis was reduced to 105 participant entries. Therefore only 105 responses were loaded on SPSS (SPSS, 2003) for analysis. It is important to note the difference in the gender subsets of the sample, of the total sample of 105 participants; 81 participants were female and 24 were male. The researcher verified that participants who were included in the sample were above the age of 18 years and they all are South African citizens.

The ages of the participants were as follows:

4.2.1 Table 4.1 – Sample Delineated by Age

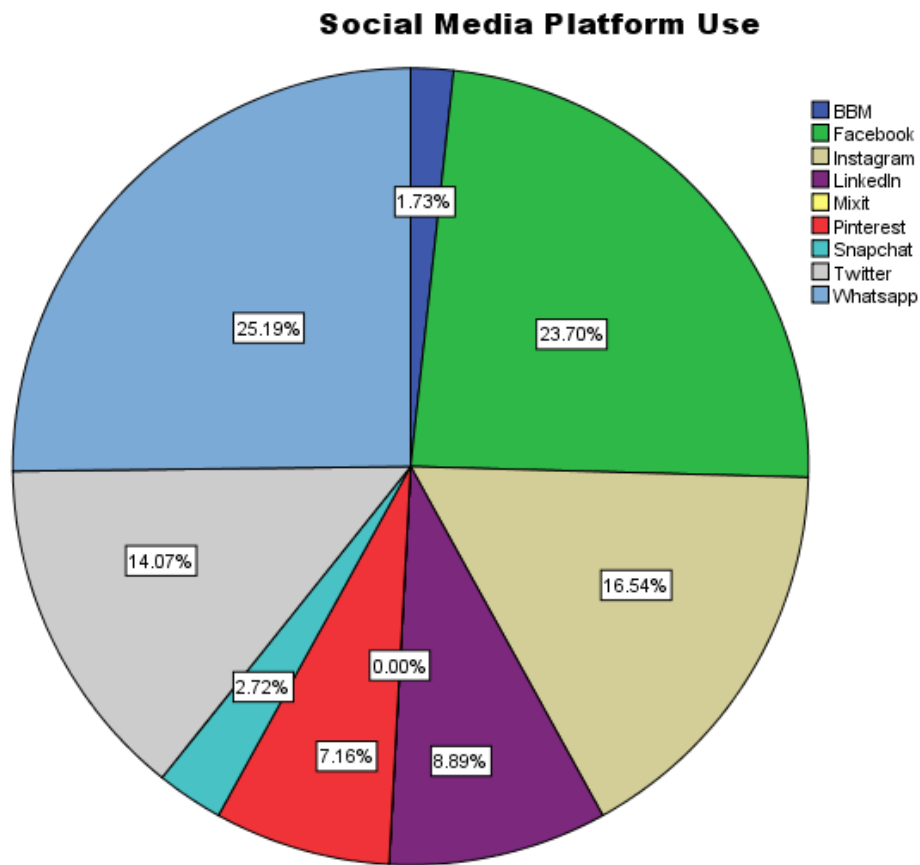
		Age		Valid Percent	Cumulative Percent
		Number	Percent		
Valid	18-21	6	5.7	5.7	5.7
	22-25	26	24.8	24.8	30.5
	26-28	25	23.8	23.8	54.3
	29-34	34	32.4	32.4	86.7
	35-38	6	5.7	5.7	92.4
	39 and above	8	7.6	7.6	100.0
	Total	105	100.0	100.0	

Out of the 105 participants, 5.7% (n= 6) were in the 18-21-year range and 24.8% (n=26) were in the 22-25-year age range. The 26-28 age range comprised of 23.8% (n=25) of the total sample size. The largest age group in the sample was the 29-34 age group, which constituted 32.4% (n=34) of the total sample size. The age group 35-38 comprised of 5.7% (n=6) of the total sample, while 7.6% (n=8) of the individuals who participated in the study were above the age of 39 years.

4.3 Social media engagement:

The participants were requested to select the social media platforms they use. Social media use is argued to be habitual and addictive among young people. Social media underscores the need for communication, information attainment, entertainment, and self-expression (Abel et al., 2016). A study conducted by JWTIntelligence (2012) revealed that 46% of the participants in the study felt that the feeling of missing a more rewarding experience, is amplified by social media engagement. The participants in the present study reported that the most popular social media platform used by them is WhatsApp (25.19%; n=26). The second highest popular social media network was reported to be Facebook (23.70%; n=25). None of the participants in the study reported to have a Mixit account. The second lowest popular social media Platform was reported to be Snapchat (2.72%; n=3).

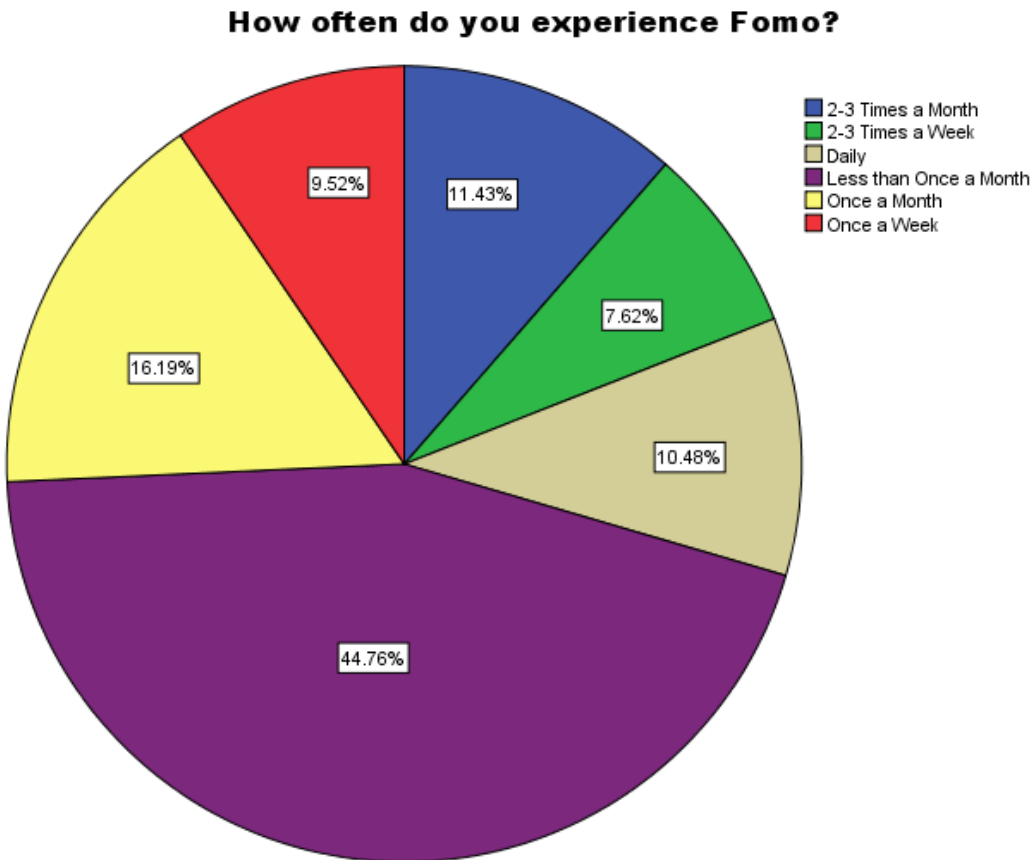
4.3.1 Figure 4.1 – Social Media Platform Use



Prevalence of FoMO:

This section will report on how often individuals experience FoMO. Individuals were asked to select the amount of times they experience FoMO, from a range of options presented to them. The results are reported in the pie chart which follows:

4.3.2 Figure 4.2 – Prevalence of FoMO



The participants in the study reported the following; 44.76% (n=47) reported that they experienced FoMO less than once a month, which was the highest-ranking group. The second highest group (16.19%; n=17) were individuals who reported experiencing FoMO once a month. From the sample, 11.43% (n=12) reported to experience FoMO 2-3 times a month, whereas 10.48% (n=11) reported to experience FoMO daily. The participants who reported to experience FoMO once a week comprised of 9.52% (n=10) of the total sample. Individuals who reported experiencing FoMO 2-3 times a week, comprised 7.62% (n=8) of the sample. The study conducted by JWTIntelligence (2012) revealed that 36% of millennials, who were categorised as individuals between the ages 18 and 34 years, reported experiencing FoMO often (amount unspecified) or sometimes.

4.4 Results:

The below table computes the key to the statistical symbols used in the models employed in this section.

4.4.1 Table 4.2 – Symbol Key

Symbol	Meaning
B	The estimated Coefficient
Y	The dependent variable in the study which is FoMO.
X	The independent variable in the study which is the satisfaction with life.
N	The number of participants in a group
SD	Standard Deviation
M	Mean score
U	error variable (this indicates the difference between observation of variable (x or y stated above) and estimate of the variable)
H_0	The null hypothesis being tested
H_1	The alternate hypothesis being tested

4.4.2 Scale Reliability:

The Cronbach's alpha coefficient measures the internal consistency of a scale. The coefficient is expressed as a number ranging from 0 to 1. The closer to zero the coefficient is the less internally consistent the items of the scale are, and the closer the coefficient is to 1, the more interrelated the items of the scale are (Tavakol & Dennick, 2011). A Cronbach's alpha coefficient that is 0.8 or higher is considered ideal for research purposes (Nunnally & Bernstein, 1994). Based on the findings reported in the table below,

one can conclude that both the scales used in the study achieved an acceptable level of internal consistency. The Cronbach's alpha coefficient for each of the scales were as follows: FoMO scale = 0.886 and the SWL scale = 0.808.

4.4.2.1 Table 4.3 – Scale Internal Consistency

Scale	Cronbach's Alpha	N of Items
FoMO questionnaire	0.89	10
SWL Scale	0.81	5

4.4.3 Descriptive statistics:

Table 4.4 below computes the descriptive statistics generated from the results of the study. The table reports the means generated, standard deviations, maximum and minimum scores obtained, in each of the measures. The mean is the most used measurement of central tendency. The mean comprises of the sum of the scores divided by the of number subject entries (Howell, 2004).

The means obtained for each of the scales were as follows: FoMO questionnaire = 5.08; SWL scale = 23.51. The standard deviation is a measure of the average number of deviations of a score from the mean. The standard Deviation for the FoMO scale is 7.2 and the SWL scale 6.2. The highest total score obtained in the FoMO questionnaire was 40 and the lowest 0. In the SWL scale the lowest total score obtained was 9 and the highest total score obtained was 35. Table 4.4 reports on the descriptive statistics obtained for each scale.

4.4.3.1 Table 4.4 – Scale Descriptive Statistics

	N	Minimu m	Maximu m	Mean	Std. Error	Std. Deviation
FoMO_Tot	105	0	40	5.08	0.70	7.2
SWL_Tot	105	9	35	23.51	0.60	6.2
Valid N	105					

Scale Item Descriptive Statistics

The next section will look at the descriptive statistics for each of the scale items. The aim of this investigation is to provide a richer understanding of the scale descriptive statistics.

4.4.3.2 Table 4.5 - FoMO Scale Descriptive Statistics

FoMO Scale Items	Q1- I get worried when I find out my friends are having fun without me.	Q2- It is important that I understand my friends "in jokes."	Q3- I fear others have more rewarding experiences than me.	Q4- It bothers me when I miss an opportunity to meet up with friends.	Q5- When I go on vacation, I continue to keep tabs on what my friends are doing.	Q6- When I have a good time it is important for me to share the details online (e.g. updating status).	Q7- Sometimes, I wonder if I spend too much time keeping up with what is going on.	Q8- When I miss out on a planned get-together it bothers me.	Q9- I fear my friends have more rewarding experiences than me.	Q10- I get anxious when I don't know what my friends are up to.
N Valid	105	105	105	105	105	105	105	105	105	105
Mean	2,43	2,40	2,40	2,46	1,91	1,95	2,22	2,54	2,24	1,61
Std. Deviation	1,16	1,26	1,18	1,24	1,04	1,06	1,28	1,22	1,15	0,86
Variance	1,34	1,59	1,40	1,54	1,08	1,12	1,63	1,50	1,32	0,74
Minimum	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
Maximum	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00	5,00

The item with the highest mean seems to be item 8 ($M=2.54$, $SD=1.22$), this item states the following: "when I miss out on a planned get together it bothers me". This item can be

associated with the concept of “social pain”. Social pain refers to the negative feelings which arise from the perception of social exclusion from a social group (Lai, Altavilla, Ronconi & Aceto, 2016). The concept of “social pain” is argued to arise from situations which potentially result in a threat to social relationships, including instances which result in being excluded from social events (Lai et al., 2016).

The item with the second highest mean is item 4 ($M=2.46$, $SD=1.24$), which states that “It bothers me when I miss an opportunity to meet up with friends”. Which is arguably related to the earlier argument about social pain caused by social exclusion. As this item explores the feelings attached to missing the opportunity to connect with social groups. Item 1 had the third highest mean score ($M=2.43$, $SD=1.16$), the item enquired whether individuals worry when they learn that other people are having a fun experience without them. The item with the lowest mean was item 10 ($M = 1.61$, $SD=0.86$). This item states that “I get anxious when I don't know what my friends are up to”. The second lowest mean was recorded on item 5 ($M=1.91$, $SD=1.04$), the item states “When I go on vacation, I continue to keep tabs on what my friends are doing”.

The following table indicates the descriptive statistics per item, on the SWL scale:

4.4.3.3 Table 4.6 - SWL Scale Descriptive Statistics

	Q1- In most ways my life is close to my ideal.	Q2- The conditions of my life are excellent.	Q3- I am satisfied with my life	Q4- So far I have gotten the important things I want in life.	Q5- If I could live my life over, I would change almost nothing.
N	105	105	105	105	105
Minimum	1	1	1	1	1
Maximum	7	7	7	7	7
Mean	4.70	4.75	4.88	4.83	4.35
Std. Deviation	1.67	1.48	1.57	1.60	1.86

The item with the highest saturated mean was item 3 ($M=4.88$, $SD=1.57$), which states “I am satisfied with my life”. The item with the lowest mean was item 5, which reads as follows: “If I could live my life over, I would change almost nothing”. The low mean computed for item 5 coincides with Hultell and Gustavsson’s (2008) results in their study.

Hultell and Gustavsson (2008) argued that age may be the factor affecting the participant response to this item. They believed that the more older participants may have made more life decisions, compared to their younger counterparts and the more decisions they have been exposed to; the more they are prone to regret their past decisions (Hultell & Gustavsson, 2008).

This sense of regret may account for older participants scoring higher on this item, and their younger counterparts scoring lower on the same item (Hultell & Gustavsson, 2008). Considering this study, the individuals who are below the age of 35 years comprised 84.76% (n=89) of the total sample, the younger participants may have scored lower on this item, and this may have affected the mean. The impact of age needs to be underscored, particularly in light of the argument by Hultell & Gustavsson (2008).

4.4.4 Inferential Stats: Tests for significant mean differences:

A t-test indicates whether the mean of the sample used in a study is significantly different from the hypothesised population mean (Howell, 2004).

Scale Significant mean difference: Based on Predicted Population Mean

The researcher used the sample means generated by the developers of the scales as the predicted population means for both scales. The mean score recorded for the FoMO scale in the study conducted by Przybylski et al. (2013) was computed to be 1.89. The mean score recorded for the SWL scale in the study conducted by Diener et al. (1985) was computed to be 25.8. The t-tests computed produced the following results:

4.4.4.1 Table 4.7 - FoMO Scale Significant mean difference: Based on Predicted Population Mean

Significant Mean Difference	
H₀	The difference between the mean score generated in this study and the predicted population mean score is not statistically significant
H₁	The mean generated in this study is statistically greater than the predicted population mean

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
FoMO Tot	105	5.08	7.20	.70

One-Sample Test						
(Test Value = 1.89)						
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
FoMO_Tot	4.535	104	.000	3.186	1.79	4.58

The mean generated from the FoMO scale in this study, shows to be statistically significantly higher than the predicted population's FoMO mean score, $t(104) = 4.535$, $p = .005$. Furthermore, the FoMO total score was significantly higher with a mean difference of 3.19, 95% CI [1.79, 4.58], than a normal predicted FoMO score of 1.89, $t(104) = 4.535$, $p = .005$, $d = .44$. The effect size is categorised as small as per Cohen's (1988) classification.

4.4.4.2 Table 4.8: SWL Scale Significant mean difference - Based on Predicted Population Mean

Significant Mean Difference	
H_0	The difference between the mean score generated in this study and the predicted population mean score is not statistically significant
H_1	The mean generated in this study is statistically lesser than the predicted population mean

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
SWL_Tot	105	23.51	6.16	.60

One-Sample Test						
(Test Value = 25.8)						
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
SWL_Tot	-3.80	104	.000	-2.29	-3.48	-1.09

The SWL mean score computed from the present study was statistically significantly lower than the predicted population SWL mean score, $t(104) = -3.80$, $p = .005$. The SWL scale mean score in the present study was statistically significantly lower with a mean difference of -2.29, 95% CI [-3.48, -1.09], than a predicted normal score of 25.8, $t(104) = -3.80$, $p = .005$, $d = .37$. The effect size is classified as small as per Cohen (1988).

This section will investigate whether the various subsets of the sample differed significantly, in terms of how they responded to both the scales used in the study. This examination will be done by computing t-tests to test for significant mean differences. These subsets comprise of the following:

- Gender: males and females
- Age: youth and non-youth participants
- Geographic Location: participants residing in Gauteng and participants residing outside of Gauteng

4.4.5 Mean Tests Scores Based on Gender

The researcher computed the following t-tests to investigate whether the mean scores computed for males and females showed to be significantly different. The results are reported in the tables below:

4.4.5.1 Table 4.9 - FoMO Significant Mean Difference: Gender

FoMO Significant Mean Difference: Gender				
H₀	The difference in the means between males and females is not statistically significant			
H₁	The female FoMO mean is statistically greater than the male FoMO mean			
no. of Observation	<u>Description</u>		<u>Mean</u>	<u>Standard Deviation</u>
n1	81	Female respondents	0.12	0.02
n2	24	Male respondents	0.05	0.02
Numerator	0.16			
Denominator	0.47			
t-estimate	0.24			
Df	104.00			
P-value	0.81			

The mean score calculated from the scores of the female participants in the study appears to be greater than the mean score of the male participants. The results from the t-test are as follows; $t(104) = 0.24$, $p = .81$. Based on the above results the null hypothesis that the difference in means between males and females is not statistically significant cannot be rejected. Abel et al. (2016) reported no significant gender differences in the study they conducted. However, in their study females showed to have a slightly higher FoMO score compared to males (Abel et al., 2016). On the contrary Przybylski et al. (2013) stated that males reported higher levels of FoMO compared to females. In the present study females seemed to have scored a higher mean compared to males.

A one-sample t-test was computed to determine whether the SWL scale score obtained by females is statistically greater than that of males. The following table records the results from this test.

4.4.5.2 Table 4.10 - SWL Significant Mean Difference: Gender

SWL Significant Mean Difference: Gender				
H₀	There is no significant difference between the SWL scores of males and females			
H₁	The female SWL mean is statistically greater than the male SWL mean			
no. of Observation	<u>Description</u>		<u>Mean</u>	<u>Standard Deviation</u>
n1	81	Female	0.86	0.02
n2	24	Outside Gauteng	0.78	0.05
Numerator	1.64			
Denominator	0.09			
t-estimate	5.31			
Df	104.00			
P-Value	0.0001			

The SWL mean score for the female participants ($M = 0.86$; $SD = 0.02$) was greater than the computed mean score for the male participants ($M=0.78$; $SD=0.05$). This difference proves to be statistically significant, the mean difference between females and males is computed to be 0.08. The results for the t-test are as follows; $t(104) = 5.31$, $p = .0001$, $d = 104$. The results indicate that we can reject the null hypothesis, namely that the difference in SWL mean scores between males and females is statistically insignificant. However, we can accept the alternate hypothesis that the SWL mean obtained by the female participants in this study is significantly greater than that of males. The effect size of this difference is classified as small, according to Cohen's (1988) d calculation.

4.4.6 Mean Tests Scores Based on Age

The researcher investigated if there is a significant difference between the mean scores of participants who are classified as youth in the South African context, and the participants who are not categorised as youth. The National Youth Commission Act in South Africa 1996 (RSA) states that the youth are individuals between the ages 14 and

34 years. For the purposes of this study this definition will constitute individuals between the ages 18 and 34 years, as the participants were required to be above the age of 18 years to participate in the study.

4.4.6.1 Table 4.11 - FoMO Significant Mean Difference: Age

FoMO Significant Mean Difference: Age				
H₀	The difference between the FoMO mean score of youth and non-youth participants is not statistically significant			
H₁	The non-youth participants mean score is statistically greater than the youth mean score.			
no. of Observation	<u>Description</u>		<u>Mean</u>	<u>Standard Deviation</u>
n1	81 Youth		0.07	0.01
n2	24 Non-youth		0.15	0.03
Numerator	0.21			
Denominator	0.42			
t-estimate	0.33			
Df	104.00			
P-Value	0.74			

The above results record the following: $t(104) = 0.33$, $p = .74$. Based on the p-value we may conclude that we cannot reject the null hypothesis that the difference in means between the FoMO mean score of the youth and the non-youth group is not statistically significant. A study conducted by Abel et al. (2016) revealed that individuals below the age of 24 years reported higher FoMO levels, compared to the individuals above the age of 24 years. The findings reported by Przybylski et al. (2013) coincided with Abel et al.'s (2016) results, as FoMO was reported to be negatively correlated to age ($r = -.37$, $p < .001$). The findings in this study revealed that the non-youth participants scored a higher mean than the youth participants, which is a variance from the abovementioned studies.

4.4.6.2 Table 4.12 - SWL Significant Mean Difference: Age

SWL Significant Mean Difference: Age				
H₀	The difference in the SWL mean score of youth and non-youth participants is not statistically significant			
H₁	The Non-youth mean is statistically greater than the youth mean			
no. of Observation	<u>Description</u>		<u>Mean</u>	<u>Standard Deviation</u>
n1	65	Youth	0.80	0.03
n2	40	Non-youth	0.86	0.03
Numerator	1.66			
Denominator	0.08			
t-estimate	6.02			
Df	104.00			
P-Value	0.0001			

The results above lead to the conclusion that we may reject the null hypothesis that the difference in the SWL mean scores of youth and non-youth groups is statistically insignificant. The results indicate that we can accept the alternate hypothesis that the SWL mean score of non-youth participants is significantly greater than the mean score of the youth subset.

4.4.7 Mean Tests Scores Based on Geographic Location

The following t-test was run to investigate whether there is a significant mean difference between participants located in Gauteng and the participants located elsewhere in South Africa. The participants who completed the online questionnaire who were not residing in Gauteng, resided in the following seven provinces; the Eastern Cape, the Free State, KwaZulu-Natal, Mpumalanga, the Northern Cape, and North West (there were no participants from Limpopo in the sample).

4.4.7.1 Table 4.13 - FoMO Significant Mean Difference: Geographic Location

FoMO Significant Mean Difference: Geographic Location				
H₀	The difference between the FoMO mean scores of participants who reside in Gauteng and the participants who reside outside of Gauteng is not statistically significant.			
H₁	The FoMO mean score of the participants residing outside of Gauteng is significantly greater than the participants who reside in Gauteng.			
no. of Observation	<u>Description</u>		<u>Mean</u>	<u>Standard Deviation</u>
n1	81 Gauteng		0.09	0.02
n2	24 Outside Gauteng		0.11	0.02
Numerator	0.21			
Denominator	0.39			
t-estimate	0.33			
Df	104.00			
P-Value	0.74			

The results from this test indicate that we cannot reject the null hypothesis. The results indicate that the difference in means between the participants from Gauteng and the participants who reside in the other provinces in South Africa (namely, Eastern Cape, Free State, KwaZulu-Natal, Mpumalanga, Northern Cape and North West) is not statistically significant. The mean score ($M = 0.09$, $SD = 0.02$) of participants residing in Gauteng, was significantly lower than the mean score ($M = 0.11$, $SD = 0.02$) of the participants residing outside of Gauteng. The mean difference proved not to be statistically significant, $t(104) = 0.33$, $p = .74$, $d = .104$.

With regards to the significance of the SWL mean score differences; between the subset residing in Gauteng and the subset of individuals who reside in the seven provinces mentioned earlier; the t-test results are populated in the table below.

4.4.7.2 Table 4.14 - SWL Significant Mean Difference: Geographic Location

SWL Significant Mean Difference: Geographic Location				
H₀		The mean difference between the SWL mean score of participants who reside in Gauteng and the participants who reside outside of Gauteng is not statistically significant.		
H₁		The SWL mean score of the participants residing in Gauteng is significantly greater than the participants who reside outside of Gauteng.		
no. of Observation	<u>Description</u>		<u>Mean</u>	<u>Standard Deviation</u>
n1	65	Gauteng	0.86	0.03
n2	40	Outside Gauteng	0.80	0.04
Numerator	1.67			
Denominator	0.08			
t-estimate	6.04			
Df	104.00			
P-Value	0.0001			

The results indicate that we can reject the null hypothesis that the mean score difference in the abovementioned subsets (participants residing in Gauteng and participants residing outside of Gauteng) is statistically insignificant. The mean difference of 0.06, proves to be statistically significant, the results computed are as follows: $t(104) = 6.04$, $p = .0001$, $d = .104$.

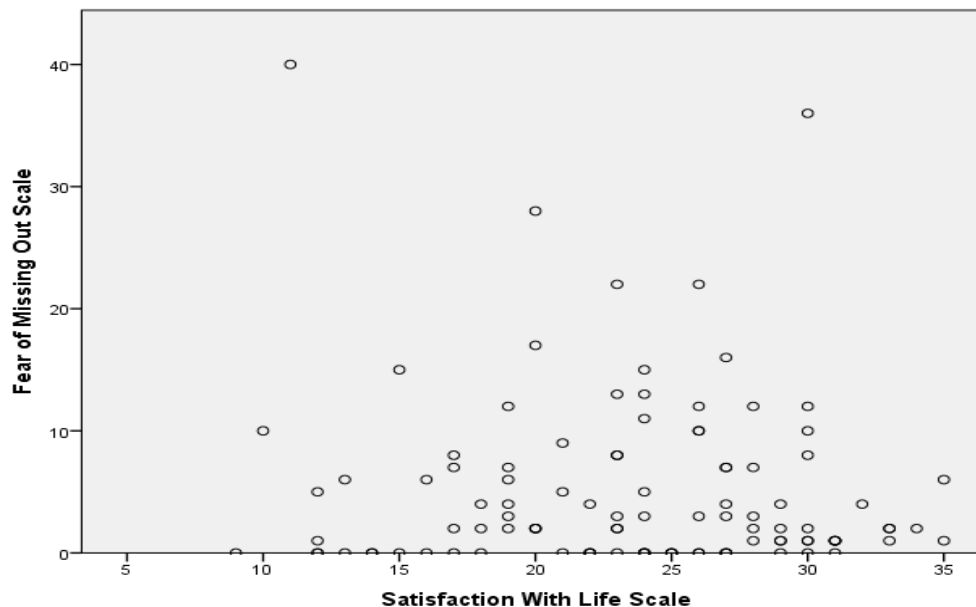
4.5 Correlation Statistics:

This section will investigate whether there is a relationship between the satisfaction with life of the participants and the FoMO they experience. The section aims to provide more insight on the nature of the relationship, if a relationship exists at all.

4.5.1 Pearson's Product-Moment Correlation Coefficient:

A Pearson's Product-Moment Correlation Coefficient determines the strength and the direction of the relationship between two continuous variables, in this study the continuous variables are FoMO and SWL. One of the assumptions made by the Pearson's correlation formula is that the relationship between the variables is linear. As such the researcher created a scatter plot to establish if the relationship between the variables is linear. The researcher used a scatter plot to visually inspect if a linear relationship exists between the two continuous variables, namely the reported level of life satisfaction and FoMO experienced.

4.5.1.1 Scatter Plot 4.1: FoMO and Satisfaction with Life



The scatterplot above indicates that there is no evidence of a linear relationship between FoMO and satisfaction with life. As such, the researcher will need to run a Spearman's rank-order correlation, as it does not assume linearity in the relationship.

4.5.2 Spearman's Rank-Order correlation:

The Spearman's rank-order correlation is a non-parametric version of the Pearson product-moment correlation. The Spearman's rank-order correlation measures the strength and the direction of the relationship between two variables. There needs to be a

monotonic relationship between the two variables (Spearman, 1904). A monotonic relationship is a relationship between variables which is characterised by a change in one variable being associated with a change in another variable, however the change does not occur at the same rate (Spearman, 1904). Since the researcher would also like to establish the statistical significance of the relationship between FoMO and SWL; the null and the alternate hypothesis are as follows:

4.5.2.1 Table 4.15 – Spearman’s Correlation Analysis

H₀	There is an association (i.e., monotonic relationship) between FoMO and SWL		
H₁	There is no association (i.e., monotonic relationship) between FoMO and SWL		

Correlations			Fear of Missing Out Scale	Satisfaction with Life Scale
Spearman's rho	Fear of Missing Out Scale	Correlation	1.000	-.01
		Coefficient		
		Sig. (2-tailed)	.	.94
		N	105	105
	Satisfaction with Life Scale	Correlation	-.01	1.000
		Coefficient		
		Sig. (2-tailed)	.94	.
		N	105	105

Results: A Spearman's rank-order correlation was computed to assess the relationship between FoMO and SWL. The Spearman's rank-order correlation revealed that the null hypothesis which states that there is no relationship between FoMO and SWL cannot be rejected ($r_s(105) = -.01, p < .94$).

Conclusion: The results show no association between the FoMO and the SWL scale scores.

Interpretation: The relationship between FoMO and SWL seems to be statistically insignificant, from the above results. As such, we cannot reject the null hypothesis that

there is no association between FoMO and SWL. To further investigate and validate the findings, the researcher computed regression models.

4.6 Inferential Statistics: Regression analyses

A regression analysis allows the researcher to investigate and predict the relationship between variables. The relationship between variables can be documented with a formula (Montgomery, Peck & Vining, 2012). In a simple regression, the researcher studies the impact a single variable has on another variable. This is done by estimating the regression line between the variables being assessed (Dupont & Plummer, 1998).

Model 1: $Y = \beta_0 + \beta_1 X + u$

Description: Simple linear regression

4.6.1 Table 4.16 - Linear Regression Model

Simple Linear Regression Model						
Source	SS	Df	MS	Number of obs	105	
Model	0,03	1	0,033	F (1, 103)	0,67	
Residual	5,00	103	0,049	Prob > F	0,41	
Total	5,03	104	0,08	R-squared	0,0065	
				Adj R-squared	-0,0031	
				Root MSE	0,2204	

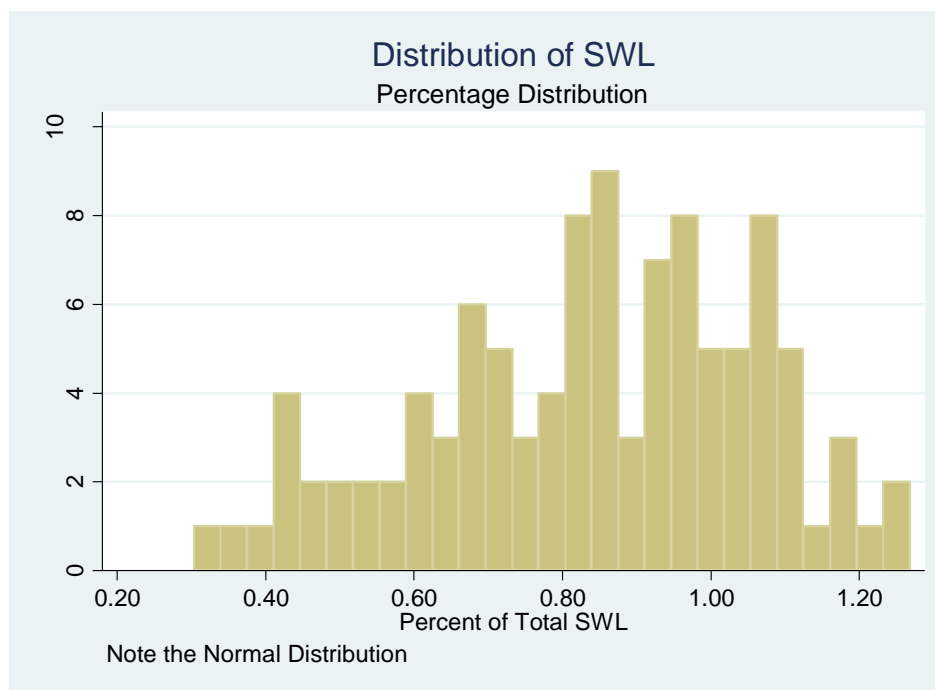
Percentage of Total SWL	Coef.	Std. Err.	T	P> t	(95% Conf. Interval)	
Percentage of Total FoMO	-0,12	0,15	-0,82	0,41	-0,42	0,17
Cons_	0,85	0,03	32,33	0,00	0,80	0,90

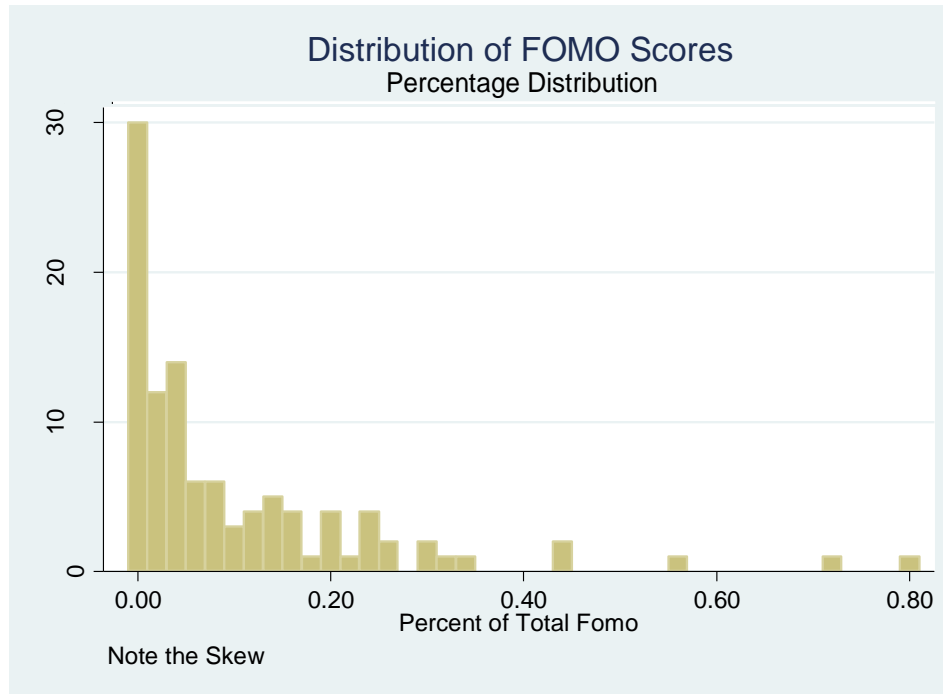
Results: Based on the above results the null hypothesis that there is no linear relationship between FoMO and satisfaction with life cannot be rejected, at neither 95% nor 90% confidence level. Furthermore, the results reveal that the P-value of F is greater than 0.1 and 0.05.

Conclusion: There seems to be no linear relationship between SWL and FoMO, when there are no other variables controlled (held constant).

Interpretation: This model also allowed the researcher to reduce the impact of outliers present in the SWL scale, and to examine if that will affect the nature of the relationship

being measured. The frequency tables below compute the distribution of SWL and FoMO. Note that while SWL scale shows somewhat a normal distribution; the distribution of FoMO is positively skewed, meaning that it does not show any resemblance of a normal distribution. Thus, we cannot expect to see a linear relationship by visual inspection, and this may perhaps suggest that there is a relationship between FoMO and SWL, that does not fit the scope of a linear model. The relationship may exhibit a complexity, which needs to be investigated further.





A solution to this variation in distribution is running a log-linear model, by transforming Y into a $\log Y$. This transformation will result in the FoMO scale's distribution being transformed to a log-normal distribution, this distribution simply means that the logarithm is normally distributed, whereas the actual scale which is not transformed is skewed. The aim of this exercise is to use a linear model regression analysis, even when the distribution is non-linear (Benoit, 2011). The transformation results in the following formula: $\log Y = \beta_0 + \beta_1 X + u$

Model 2: $\log Y = \beta_0 + \beta_1 X + u$

4.6.2 Table 4.17 – Log-Linear Regression Model

Log-Linear Regression Model					
Source	SS	df	MS	Number of obs	105
Model	21.86	1	21.86	F (1, 103)	12.64
Residual	187.15	103	1.73	Prob > F	0.0006
Total	200.01	104	1.92	R-squared	0.1093
				Adj R-squared	0.1006
				Root MSE	1.3152

Percentage of Total SWL	Coef.	Std. Err.	T	P> t	(95% Conf. Interval)
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Percentage of Total FoMO	2.08	0.59	3.55	0.001	0.92	3.25
Cons_	-0.02	0.51	-0.03	0.98	-1.02	0,99

Results: On this model, the results indicate that the P-value of the F-test is less than 5%. This indicates that we can reject the null hypothesis that there is no relationship between FoMO and SWL, and accept the alternate hypothesis that there is a relationship between FoMO and SWL.

Conclusion: There seems to be a positive, but a small effect of SWL on FoMO.

Interpretation: When no other factor is accounted for (no other variable is included and controlled in the model), a 1% change in SWL, results in a 0.964584 ($10^{(2.083 \times \text{Log}(1))}$) change in FoMO scores. Although there seems to be a statistically significant positive relationship between the two variables; the effect is very small.

This can also be shown by interpreting the R^2 which gives us a value of 0.1093. This suggests that 10.93% of the movement in FoMO can be explained by the movement in SWL, the remaining 89.61% is due to factors exogenous to this model. Nonetheless, the value of the R^2 is unsurprisingly small, as this model is studying the relationship between only two continuous variables (FoMO and SWL). The value is expected to improve with the addition of other independent variables. In practical terms these findings make sense, as we cannot expect FoMO to be solely influenced by one's SWL. FoMO can be influenced by other factors, such as age, gender, one's location etc. The relationship between FoMO and SWL could possibly improve if we accounted for some of these variables. Thus, in the next model, we will include three other variables namely; gender, age, and location. This analysis will enable the researcher to examine the effect these factors have on the relationship between FoMO and SWL.

Model 3: $\log Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + u$

4.6.3 Table 4.18 - Multiple Log-Linear Regression Model

Multiple Log-Linear Regression Model					
Source	SS	Df	MS	Number of obs	105
Model	24.43	4	6.11	F (1, 103)	3.48
Residual	175.85	100	1.76	Prob > F	0.01

Total	200.01	104	1.92	R-squared	0.12
				Adj R-squared	0.09
				Root MSE	1.33

Percentage of Total FoMO	Coef.	Std. Err.	T	P> t	(95% Conf. Interval)	
Percentage of Total SWL	1.91	0.62	3.08	0.003	0.68	3.15
Gender	-0.34	0.32	-1.05	0.30	-0.97	0.30
Age	0.08	0.11	0.72	0.48	-0.14	0.29
Province	0.10	0.06	0.16	0.87	-0.12	0.14
_cons	-0.10	0.64	-0.15	0.88	-1.36	1.17
Cons_	-0.02	0.51	-0.03	0.98	-1.02	0.99

Results: The P-value of the F-test reported above is less than 5%, as such we have grounds to reject the null hypothesis in favour of the alternate hypothesis.

Conclusion: There is a positive but even smaller effect of SWL on FoMO.

Interpretation: When three more factors are added to the model, and accounted for (age, gender, and location), a 1% change in SWL, results in only a 0.79965 ($10^{(1.913 \times \text{Log}(1) - 0.0971)})$ change in FoMO. Note that the effect size is even smaller in this model.

4.7 Interpretation of Results:

Biographical Profile of Sample:

The sample used for this study comprised of 105 participants. The sample contained 77% females and 23% males. The sample included only individuals above the age 18 years, 86.7% of the sample comprised of individuals below the age of 35 years. Individuals who were above the age of 35 years accounted for 13.3% of the total sample.

Social media Engagement Findings:

Participants were asked to select the social media platforms they use from a list of social media platforms presented to them. The sample used in the study revealed that WhatsApp Instant Messenger is the most popular social media network (25.19%; n=26). This is in line with a report by “Digital in 2016 - We Are Social UK” (2016) which reported

that the instant messenger WhatsApp was the most popular social media platform, with Facebook being the second most popular social media network ("Digital in 2016 - We Are Social UK," 2016). In line with the findings by "Digital in 2016 - We Are Social UK" (2016), the findings of the present study revealed that Facebook was the second most popular social media network, as 23.7% (n=25) of participants reported using Facebook. The participants of this study reported not to use Mixit, and the second least used social media platform was Snapchat. Snapchat is argued not to have reached much popularity in South Africa yet, as only 2% of the 200 million Snapchat users were reported to be South African users in 2016 (Madlala, 2016).

How often Participants Experienced FoMO:

The highest percentage (44.76%; n=47) of participants, reported experiencing FoMO less than once a month. The amount of people who reported experiencing FoMO once a month comprised of 16.19% (n=17). Furthermore, the individuals who experienced FoMO 2-3 times a month, comprised of 11.43% (n=12) of the sample. The individuals who reported experiencing FoMO once a week included 9.52% (n=10) of the overall sample; whereas 7.62% (n=8) reported that they experience FoMO 2-3 times a week. The participants who reported to experience FoMO daily, comprised 10.48% (n=11) of the sample.

Measure of Reliability in Findings:

The Cronbach's alpha coefficient was used to measure the internal consistency of the data; and the results proved that both questionnaires met the internal consistency criteria. The Cronbach's alpha is deemed highly suitable to investigate reliability in questionnaire and survey type instruments. The FoMO questionnaire aims to measure the degree of FoMO experienced by subjects, it comprises of 10 items. The FoMO scale showed a high level of internal consistency, as determined by a Cronbach's alpha coefficient of 0.89. The satisfaction with life scale measures the construct of subjective satisfaction with one's life, the scale comprises of 5 items. This scale also showed a high level of internal consistency, with a Cronbach's alpha coefficient of 0.81. This information is valuable to report, as it is crucial to establish whether the scales used in this research measure the constructs they attempt to measure.



Descriptive statistics Findings:

The descriptive statistics section of a study reports the features of the data obtained in the study. This section will discuss the overall summary of how the sample fared in the scales administered in the study. The sample mean obtained in the FoMO questionnaire was 5.08 (SD = 7.2). This mean is higher than the mean reported by Przybylski et al. (2013), which was 1.89. On the SWL scale, the mean score was 23.51 (SD = 6.16), this mean was lower than the mean obtained in the study conducted by Diener et al. (1985).

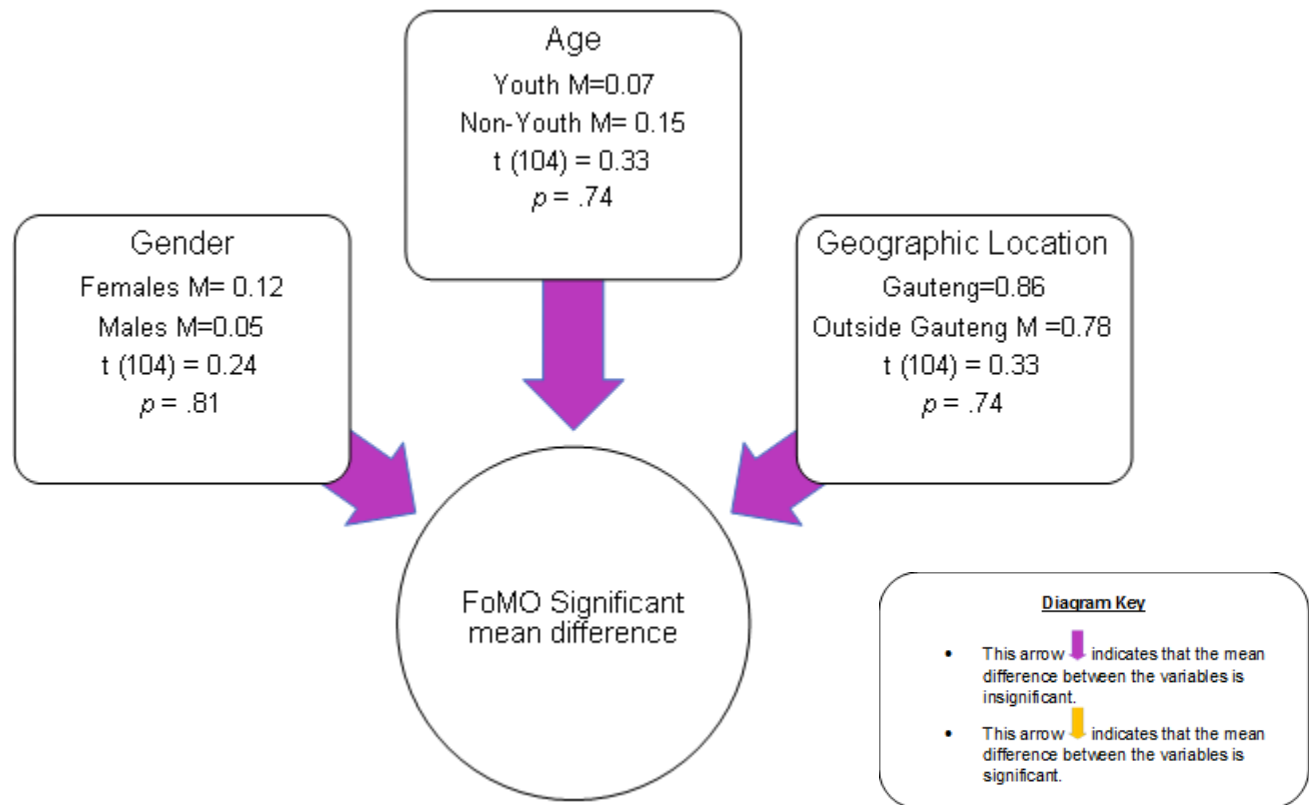
Inferential Statistics Findings:

A one sample t-test was conducted to establish if the differences between the means generated (sample mean vs. hypothesised population mean) were statistically significant. The one sample t-test on the FoMO scale revealed that the mean difference between the mean obtained by the sample and the predicted population mean is significantly different. The effect size of the difference between FoMO means is categorised as small, according to Cohen (1988). The t-test for the SWL scale also revealed that the difference in the means is statistically significant, and the effect size is classified as small as well (Cohen, 1988).

Significant Mean Difference Investigations: Gender, Age, and Location:

This section will discuss the tests of significant mean difference which were computed for the FoMO and the SWL scale. The variables which were examined were gender, age, and the geographic locations of participants. The following diagrams record the findings of the tests. The arrows below are colour coded to indicate a statistical significance. Where you see this arrow  note that it indicates that the mean difference between the variables is insignificant. Whereas, this arrow  indicates there is a statistically significant difference in the means computed for the variables being tested.

4.7.1 Figure 4.3 - FoMO Scale Tests of Significant Mean Difference

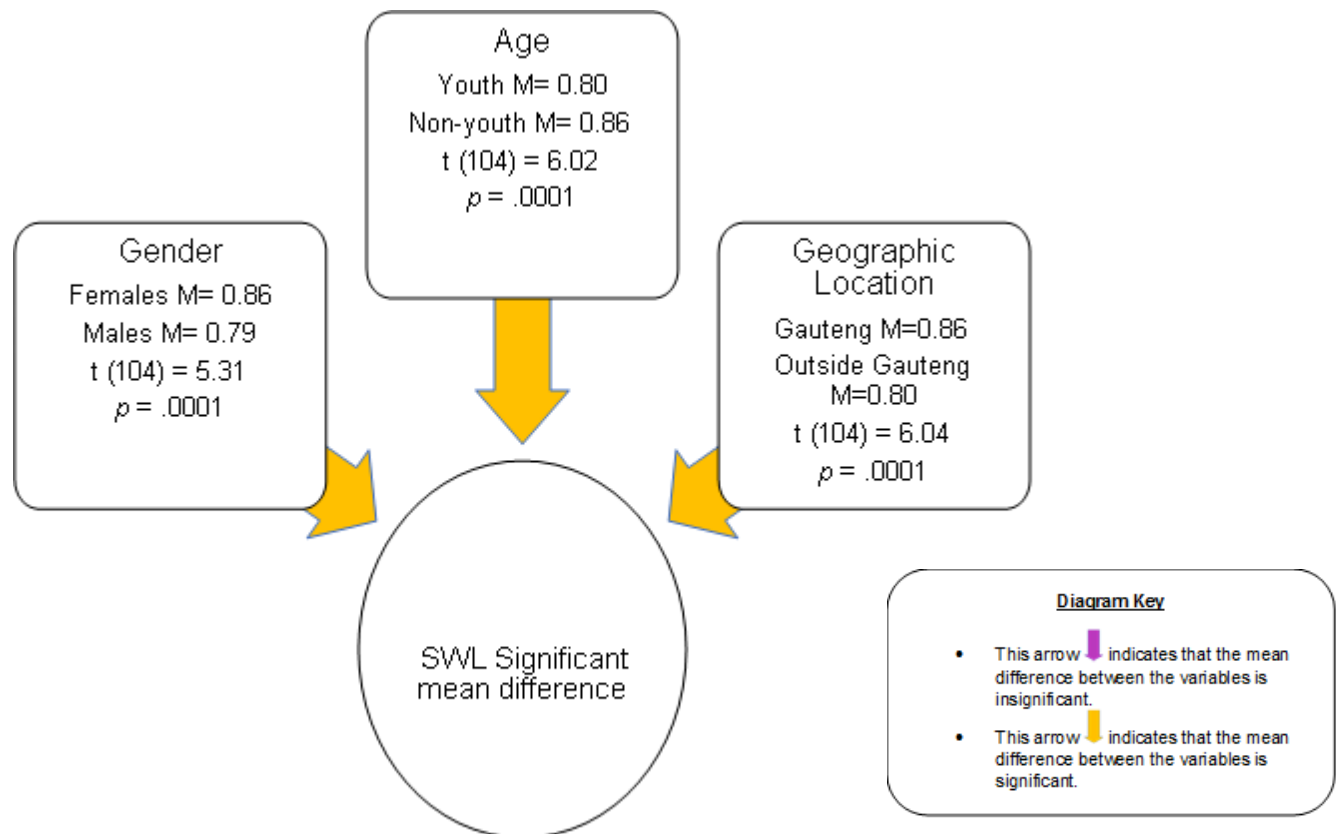


The diagram above documents the results from the single sample t-tests computed to investigate whether the mean differences between gender, age and geographic location are significant. The female participants scored higher than the males on the FoMO scale, however the mean difference was not statistically significant to deduce that this type of difference is likely to be found in the predicted population. In terms of age, the non-youth participants scored higher than the youth participants. However, the mean difference proved not to be statistically significant, to deduce that this type of distinction would possibly be found in the predicted general population.

Przybylski et al. (2013) argued that both age and gender had a significant effect on FoMO scores; $t(2075) = 2.12$, $p = 0.03$. They argued that the younger participants, particularly younger males tended to score higher on the FoMO scale compared to their female counterparts (Przybylski et al., 2013). These gender differences were not noted in the older participants in the study (Przybylski et al., 2013). A t-test was computed to test the significance of the difference between the mean score of the participants located in

Gauteng and the participants located outside of Gauteng. Individuals located outside of Gauteng scored higher on the FoMO scale, however the difference in mean scores proved to be statistically insignificant.

4.7.2 Figure 4.4 - SWL Scale Tests of Significant Mean Difference



The results report that females scored a higher mean on the SWL scale and the difference in mean proves to be statistically significant. There was also a difference in the mean scores of youth and non-youth participants, and the difference proved to be statistically significant as well. The participants located in Gauteng scored a higher mean, compared to the participants located outside of Gauteng (combined mean of all the provinces). This difference also proved to be statistically significant, suggesting that this type of difference would likely be found in the general population.

Investigation of the relationship between FoMO and SWL:

The process of investigating the relationship between FoMO and SWL introduced statistical complexity, as the relationship between FoMO and SWL proved to not fit the

scope of a linear model. The first step of exploring this relationship entailed generating a scatter plot, to get a visual perception of the type of relationship being investigated. After a visual inspection of the relationship between FoMO and SWL on the scatter plot, the researcher established that the relationship between the FoMO scores and the SWL scores was not linear, in the present sample. This finding was significant as it meant that a Pearson's Product-Moment Correlation Coefficient would not be an effective measure of the relationship between FoMO and SWL, as the Pearson's Product-Moment Correlation Coefficient assumes linearity in the relationship of the variables being measured.

The researcher then decided to compute a Spearman's Rank-Order correlation, as it does not assume linearity in the relationship between FoMO and SWL. The results yielded from this investigation revealed that the relationship between the FoMO and SWL scores was statistically insignificant. To further investigate the nature of this relationship the researcher computed a regression model. The first model which was investigated was a simple linear regression analysis.

As expected the model revealed that there is no linear relationship between FoMO and SWL. However, this model allowed the researcher to standardise the data to eliminate the effect of outliers in the explanatory variable (SWL). This task also revealed that the distribution of the SWL scale showed a normal distribution and the distribution of the FoMO scale showed to be skewed. To eradicate this variance in distribution, a log-linear model was employed. This model transforms the formula used in a simple linear regression model, by changing the skewed distribution of the dependent variable (FoMO) to a log-normal distribution. This model is effective when analysing a non-linear relationship between variables. This model revealed that there is a statistically significant relationship between FoMO and SWL, however the effect size of the relationship is small.

To investigate whether other variables affect the relationship between FoMO and SWL, such as gender, age, and the geographic location of the participants; a multiple linear regression model was computed. Although, the overall model improved from 10% to 12% (as seen in the R^2 measure). The fact that the effect of SWL on FoMO eroded in this model suggests that a part of the effect (when no other variables are introduced) was an

indication that other factors impact the presentation of FoMO. Based on the findings in this study, we can conclude that SWL is not sufficient to bring about a meaningful change in FoMO. Furthermore, its influence diminishes as we take other factors into consideration. These findings are contrary to the findings reported by Przybylski et al. (2013), as they reported a negative correlation between FoMO and life satisfaction. It is important to note that they used a different scale to measure satisfaction with life. Nonetheless, the present study proves to deviate from the findings of the study reported by Przybylski et al. (2013).

4.8 Conclusion:

This chapter reported on the findings from the study and the methods used to address the research questions posed in the earlier chapters. The profile of the sample was reported, and a total of 105 participant responses were loaded on to SPSS. The sample comprised of 81 females and 24 males. The participants who were 34 years and below constituted 84.76% (n=89) of the sample, and 15.23% (n=16) of the sample comprised of individuals above the age of 35 years. The social media engagement investigation revealed that WhatsApp instant messenger seems to be the most popular media platform used by the participants in this study. Facebook was reported to be the second most popular social media platform used. In terms of the prevalence of FoMO; 44.76% (n=47) of the participants reported to experience FoMO less than once a month. The participants who reported to experience FoMO at least once a day constituted 10.48% (n=11) of the sample.

Both the FoMO and the SWL scales achieved an acceptable level of internal consistency. The mean score for the FoMO questionnaire in this study proved to be significantly higher than the mean score recorded by Przybylski et al. (2013). The mean score computed for the SWL scale in this study proved to be significantly lower than the mean reported by Diener et al. (1985). When investigating the relationship between FoMO and SWL, the researcher learnt that the relationship is non-linear. The researcher had to compute a log-linear regression model to investigate the relationship between FoMO and SWL. This model revealed that there is a small positive effect of SWL on FoMO. The researcher computed a multiple regression model to investigate how the inclusion of other variables

impacts the relationship between FoMO and SWL. The results from this investigation revealed that the effect of SWL on FoMO is reduced when other variables are included. The conclusion from this investigation is that the level of SWL experienced is not sufficient to produce meaningful change in FoMO.

Chapter 5: Discussion and Conclusion

5.1 Introduction:

This study was motivated by a study conducted by Przybylski et al. (2013), which investigated various aspects of FoMO. The aspect that appealed to the researcher was the investigation of the association between FoMO and satisfaction with life. The findings from the study conducted by Przybylski et al. (2013) indicated that FoMO is negatively correlated with satisfaction with life. This means that most of the individuals who participated in the study conducted by Przybylski et al. (2013) who reported high levels of FoMO, subsequently reported low levels of life satisfaction (Przybylski et al., 2013).

This chapter will discuss the findings of the research in comparison to the findings reported by Przybylski et al. (2013), and other reported findings. The research questions which the researcher aimed to address will be discussed, and the findings collected in the research will be presented, considering the research questions. The researcher will then discuss the limitations of the study and the recommendations for future research studies will be stated. Lastly, concluding remarks by the researcher will be presented.

5.2 Discussion:

The research questions which the researcher aimed to address in the study are listed in the table below:

Research Questions	Supportive Evidence Obtained?
Which social media platforms are popularly used in South Africa?	Yes
What is the prevalence of FoMO in the sample?	Yes
What is the nature of the statistical relationship between satisfaction with life and FoMO in the South African context?	Yes

The section which follows will attempt to discuss the findings of the study, in view of the research questions listed in the table above. The additional significant findings in the study will be presented thereafter.

5.2.1 RQ1: Which social media platforms are popularly used in South Africa?

Al-Menayes (2016, p. 41) stated that *“FoMO is postulated to be a by-product of heavy social media usage”*. The aim of this investigation was informed by the argument that there is a close association between FoMO and social media engagement. The researcher wanted to examine the social media platforms popularly used in the South African context, and compare these findings with international trends. The researcher requested that the participants select the social media platforms which they used, from a list presented to them. The findings from the investigation revealed that the most widely used social media platform was WhatsApp instant messenger. As 26 (25% of the entire sample) out of the 105 participants reported using WhatsApp instant messenger.

In the current study, Facebook was the second most popular social media network. Instagram was selected as the third most popular social media platform, whereas twitter was selected as the fourth most popular social media platform. The professional networking platform LinkedIn was the most popular platform following twitter. Snapchat was the second least popular social media network. The chat app Mixit was the platform least popular in the sample, as no one reported to have a Mixit account in the sample.

According to “Digital in 2016 - We Are Social UK” (2016) Facebook continues to dominate the social media platforms, with 1.5 billion active users. WhatsApp instant messenger users grew by 50% in 2016. The findings reported above show to be in line with global trends, as Facebook and WhatsApp instant messenger seem to be the most used social media platforms in the sample. The number of global internet users have increased exponentially as well. Internet users were reported to have increased to 3.42 billion in 2016, meaning that 46% of the world population uses the internet in some way. Social media users grew to 31% (2.31 billion) of the overall world population (“Digital in 2016 - We Are Social UK,” 2016). The table below populates the trends in internet user growth over the last five years.

5.2.1.1 Table 5.1 – Trends in Internet User Growth

Year	Internet Users**	Penetration (% of Pop)	World Population	Non-Users (Internetless)	1Y User Change	1Y User Change	World Pop. Change
2016*	3,424,971,237	46.1 %	7,432,663,275	4,007,692,038	7.5 %	238,975,082	1.13 %
2015*	3,185,996,155	43.4 %	7,349,472,099	4,163,475,944	7.8 %	229,610,586	1.15 %
2014	2,956,385,569	40.7 %	7,265,785,946	4,309,400,377	8.4 %	227,957,462	1.17 %
2013	2,728,428,107	38 %	7,181,715,139	4,453,287,032	9.4 %	233,691,859	1.19 %
2012	2,494,736,248	35.1 %	7,097,500,453	4,602,764,205	11.8 %	262,778,889	1.2 %

Source: ("Number of Internet Users (2016) - Internet Live Stats", 2016)

Based on the above table there has been a 45% cumulative increase of internet users over the last five years. The notion of dependence on computer-mediated communication has been widely studied. These studies have focused on over reliance on computer mediated communication in the daily functioning of individuals (Al-Menayes, 2016). In more recent studies researchers have focused on mobile phones and the convenience they provide, by allowing an individual to keep in contact with the world through these smaller devices (compared to desktops and laptops). "Digital in 2016 - We Are Social UK" (2016) reported that in 2016 alone, 1.97 billion individuals accessed social media platforms through their mobile phones.

Computer-mediated communication dependence can be seen in text messages and social media platform engagement (Al-Menayes, 2016). Mobile phones have become more accessible to a larger number of individuals, as the operational costs of producing them has decreased over the years (Al-Menayes, 2016). One can argue that computer-

mediated communication can be linked to social media engagement, because of the use of mobile devices to access social networking platforms.

The leaders in the social network platforms are Facebook, Pinterest, Twitter, and LinkedIn (Abel et al., 2016). These networks are reported to have the highest users. These social networks have unique capabilities, and require the individuals to share aspects of themselves with the public (Abel et al., 2016). One cannot deny that social media platforms play an important role in the presentation of FoMO, even though the concept of FoMO supersedes social media use. Abel et al. (2016) argued that social media may be associated with an increase in FoMO and the increased amount of people vulnerable to it.

Online vulnerability according to Buglass, Binder, Betts and Underwood (2017) refers to the posed danger to one's reputation, or psychological and physical well-being, through online engagement. By merely being online individuals are not susceptible to online vulnerability. Buglass et al. (2017) argued that it is not the media engagement that is the problem, the problem lies in how an individual interacts with the social media platform. These detrimental behaviours include increased self-disclosure or the accrual of unmanageable social media networks (Buglass et al., 2017).

Likewise, Przybylski et al. (2013) asserted that FoMO could be the mediator which connects unfulfilled psychological needs to social media engagement, and the focus should not be on the social medium used, but the motivation for using that particular medium (Przybylski et al., 2013). This argument was based on the Self-Determination theory which postulates that need satisfaction is largely associated with behavioural regulation, and FoMO emerges because of unfulfilled needs. The theory underscores three basic psychological needs: competence, autonomy, and connectedness with others (Przybylski et al., 2013). A study conducted by Elhai, Levine, Dvorak, and Hall (2016) revealed that increased frequency of social media use was associated with the need for physical touch. The need to physically touch something has been associated with an individual's frequent use of a mobile phone, as some mobile phones require an individual to touch the screen to access features. The need for touch refers to a tactile sensation associated with touching a phone (Elhai et al., 2016). This need is described as the desire

to access sensory information through using hands. Research indicates that individuals who have a higher need for touch will use their phones more often than other people, to meet this need (Elhai et al., 2016). This research can be linked to Maslow's (1943) theory of human motivation which postulates that humans are inclined to satisfy their needs to avoid the psychological frustration of an unmet need. One can argue that individuals may be inclined to satisfy this need for touch, to avoid the frustration associated with this need not being met.

Thomson (2016) argued that the average student spends about eight to 10 hours on their mobile phone. This increase in social media engagement evokes the fear that one is missing out from a more rewarding experience (Thomson, 2016). In the study conducted by Przybylski et al. (2013) results indicated that FoMO is positively correlated to social media engagement. Furthermore, this study revealed that students who scored high in FoMO, were more likely to log into their social media accounts during lectures. Individuals who scored high in FoMO also seemed to get easily distracted by text messages, emails and social media notifications while driving (Przybylski et al., 2013). An interesting element which was beyond the scope of this study, is the amount of time the individuals spent on the respective social media platforms which they reported to use. It would be interesting to learn this as it may shed more light on the social media involvement and FoMO association within the South African context.

5.2.2 RQ2: What is the prevalence of FoMO in the sample?

In the sample, the researcher learnt that 47 participants reported experiencing FoMO less than once a month. Whereas, 16 individuals reported experiencing FoMO at least once a month, and 12 individuals reported experiencing FoMO 2-3 times a month. There were 30 individuals who reported experiencing FoMO weekly, varying from once a week to daily. The statistics from the present study are in keeping with the records reported by a South African pharmaceutical company, which collected survey data regarding the prevalence of FoMO in South Africa. The data revealed that 62% of the 3000 participants reported to experience a constant fear that they are missing a more rewarding experience (It's official: South Africans have FOMO, 2012).

The rationale for investigating this aspect was to establish the frequency of FoMO experienced by individuals. The researcher found that most studies do not report on the frequency of the experience of FoMO, instead the focus is mainly on the frequency of social media engagement. The researcher concedes that FoMO levels have been associated with social media engagement (Przybylski et al., 2013), however the presentation and the frequency of FoMO cannot be limited to social media engagement. Individuals with higher FoMO levels are reported to be more likely to check their social media accounts after waking up, they seemed to have the habit of checking social media platforms before sleeping and while eating as well (Przybylski et al., 2013). However, the researcher was curious about the prevalence of the isolated feeling of FoMO, without any compensatory behaviour (such as social media engagement).

It has been reported that an increased prevalence of FoMO is associated with a pathological relationship with social media networks. People who experience FoMO more frequently tend to check their phones while driving and tend to check social media networks upon waking up (Riordan, Flett, Hunter, Scarf & Conner, 2015). FoMO has also been linked to increased alcohol consumption in college students, and increased risky behaviour. As those who experience FoMO often check social media websites more frequently, and they are likely to get enticed to go to events which involve alcohol consumption (Riordan et al., 2015). As stated earlier, the construct of FoMO seems to surpass social media use, as it is argued to be a phenomenon which existed prior to the social media epidemic (Wortham, 2011).

5.2.3 RQ3: Is there a statistically significant difference between how the research sample fared and the hypothesised population mean?

The researcher found that the mean score for the FoMO scale in this study was significantly higher than the predicted population mean computed by Przybylski et al. (2013). This could be an indication that individuals in the South African context may experience FoMO in a higher intensity compared to the sample used by Przybylski et al. (2013). The other factor to consider is the magnitude of the study conducted by Przybylski et al. (2013) (n= 1023) and the magnitude of the present study (n=105). The present study

was embarked as a preliminary quest to obtain a better understanding of FoMO, as there seems to be limited data on this phenomenon within the South African context.

The researcher also discovered that the SWL mean score computed from the present study is significantly lesser than the mean score computed by Diener et al. (1985). The difference was calculated to be -2.29. Suh, Diener and Updegraff (2016) asserted that psychological research investigating life satisfaction across various contexts over the last two decades has revealed cultural differences. There are very few studies which tap into why these differences exist. Suh et al. (2016) argued that social norms and context inform life satisfaction. In collective societies, the question whether individual life satisfaction is socially approved is a relevant question. Two studies conducted by Suh, Diener, Oishi, and Trandis (1998); Schimmack, Radhakrishnan, Oishi, Dzokoto and Ahadi (2002) revealed cultural differences in how respondents fared on the SWL scale, the researchers concluded that the main factor contributing to this variance was culture based.

The sample in the present study expectedly fared differently from the predicted populations which the scales were normed for. These scales were not normed for the South African population and various factors could account for the variance in scores. It would be remiss of the researcher to ignore the importance of the cultural appropriateness of the instruments used to collect the research data. Nonetheless, these scales were used as there were no scales normed for the South African population which measure the construct of FoMO and SWL.

5.2.4 RQ4: What is the nature of the relationship between satisfaction with life and FoMO, within the South African context?

The main research question posed in the study was whether FoMO and satisfaction with life are negatively correlated. To answer this question a Pearson's moment correlation analysis was computed, and the findings indicated that there is a nominal association between FoMO and SWL. The researcher computed a log-linear regression analysis, as various investigations revealed that the relationship between FoMO and SWL was non-linear. This procedure revealed that SWL has a small positive effect on FoMO. This means that a slight increase in SWL may result in a small increase in FoMO. These findings seem to deviate from the negative correlation between FoMO and life satisfaction

reported by Przybylski et al. (2013). The results from the present study correspondingly revealed that the effect of SWL on FoMO further diminished, when other variables (gender, age, and geographic location) were included to compute a multiple regression analysis.

It is important to note that the current study used a different scale from Przybylski et al. (2013) to measure life satisfaction. In this study, the researcher chose to use the SWL scale, which is a scale developed to measure subjective well-being. The developers of the scale aimed to measure subjective wellbeing through a cognitive judgemental process (Diener et al., 1985). This judgemental process requires the participants to assess their overall life satisfaction, this process requires participants to compare their current position to their ideal position (Arrindell et al., 1999). Diener et al. (1985) proposed a scale which measures the global concept of satisfaction with life. This global measure was preferred instead of measuring the concept of satisfaction with life through specific domains (e.g. health, relationships, and socio-economic position) (Diener et al., 1985). The researcher decided to use this global measure to assess the overall concept of subjective well-being.

In the study conducted by Przybylski et al. (2013) the scale used to assess the concept of life satisfaction focused on four specific domains. These domains included physical health, emotional well-being, personal relationships, and overall life satisfaction. Scores from these items were averaged to compute an overall score of life satisfaction (Przybylski et al., 2013). To justify a measure which does not separate life satisfaction into specific domains, Diener et al. (1985) argued that an individual should be given the responsibility of judging their overall life satisfaction. This process should be independent from the researcher's suggestions of the specific areas which the researcher deems to construct life satisfaction (Diener et al., 1985). For this reason, the researcher chose to use the global measure of life satisfaction, since it is not limited to specific domains.

The researcher believed it would be difficult to choose aspects important in the construction of life satisfaction. As these aspects differ from individual to individual and it would place some participants at a disadvantage; should the researcher not cover all the domains the participants may believe to construct the concept of overall life satisfaction. Nonetheless, the different scale used in the current study from the study conducted by

Przybylski et al. (2013) to measure the construct of life satisfaction could be linked to the variation in results.

Allen (2016) argued that FoMO can be a motivation to achieve goals and for individuals to have the desire to achieve more than what they have achieved. The exposure to people who are doing incredible things with their lives, may motivate one to broaden up their prospects of the future and not succumb to complacency (Allen, 2016). Allen (2016) further argued that having an all-encompassing fear about what others are doing is harmful, however not having this fear at all is just as harmful. The findings from the present study revealed that a slight improvement in life satisfaction was associated with a slight increase in FoMO.

The researcher believes that this small positive effect correlation could be linked to Allen's (2016) argument, which purports that the more individuals feel satisfied with their lives; the more they may want to do with their lives and want to reach greater heights. It could be that FoMO is an instrument which fuels the motivation to achieve more. Fear of missing out may also increase the life satisfaction individuals may feel, as they achieve more with the aid of FoMO. It has also been recognised that individuals may feel more positive emotions when they post aspects of their lives on social media, and they gain the acknowledgement of others, through likes and comments (Davis, 2012). The results from the study indicate that the hypothesis that FoMO is negatively correlated with SWL cannot be accepted.

According to Maslow (1943) the satisfaction of physiological, safety, love and self-esteem needs, results in a discomfort if an individual feels a sense of meaninglessness. This meaninglessness becomes prominent when the need to self-actualise arises, which is the last and most high order need. The need to self-actualise evokes a desire to do what one feels is their purpose in life (Maslow, 1943). Considering the present study, it could be that the individuals who achieved an adequate level of life satisfaction may be under the perception that their lower order needs have been satisfied. Moreover, they may have the motivation to achieve more than what they have. This desire to achieve more may translate in FoMO increasing. As they may be exposed to social media updates of others achieving what they wish to achieve as well.

The concept of hyper-intentionality coined by Frankl (1972), refers to the notion that the pursuit of pleasure may be self-defeating. He argued that a human being essentially is not in search for happiness, but for reasons to be happy (Frankl, 1972). Frankl (2008, p.141) asserted that “once and individual’s search for a meaning is successful, it not only renders him happy but also gives him the capability to cope with suffering”. Considering the findings from the current research one could hypothesise that the positive correlation between SWL and FoMO could be related to an individual’s own search for meaning as well. As stated earlier, FoMO may assist individuals in their search for meaning in their lives. FoMO can aid their quest to be more than what they currently are.

On the other hand, some individuals may be able to tolerate the feeling of missing out, as they have found meaning in certain areas in their lives. Therefore, the individuals who have found meaningful areas in their lives can withstand the negative states evoked by FoMO, and these negative emotional states do not render these individuals debilitated. In essence, these individual’s may experience FoMO, but they may not become consumed by the feeling of FoMO. Abel et al. (2016) believed that social media engagement could make some individuals feel more positive about their lives, as they compare themselves with the lives of others. This is in line with the social comparison theory, as it asserts that one benefit from interactions with other human beings, is the ability to compare oneself to others. By engaging in this process of comparison individuals can also judge whether the opinions they have are in line with that of others (Festinger, 1954).

Furthermore, one uses comparison to judge whether they have attained what is deemed appropriate for their position (Festinger, 1954). In as much one can argue the negative implications related to social media use and the impact social media has on FoMO, it could also be that social media may give individuals the opportunity to compare themselves with similar individuals. One could further argue that social media gives individuals the opportunity to post content they may feel good about, and the likes or comments they receive may further affirm the positive feelings they may have about their lives. A study conducted by Wang, Jackson, Gaskin & Wang (2014) revealed that frequent use of social networking sites was positively correlated to increased well-being.

5.2.5 Additional significant Findings in the study:

The researcher found that there were no significant mean differences in the FoMO scale, based on gender, age, and geographic location in South Africa. The lack of significant mean difference based on gender coincides with the findings reported by Abel et al. (2016). Nonetheless, in the present research the females (n=81) scored a higher mean on the FoMO scale, compared to their male (n=24) counterparts. Przybylski et al. (2013) reported that younger males scored higher on the FoMO scale.

Przybylski et al. (2013) further reported that in their study older participants reported less social media use. In the current study, the researcher found that the non-youth participants (n=16) scored a higher FoMO mean compared to the youth (n=89) participants, on the FoMO scale. Individuals residing outside of Gauteng (n=42) scored a higher mean on the FoMO scale compared to individuals who reside in Gauteng (n=63). Donohoe (2007) postulated that the increase in the development of rural areas, has allowed rural communities access to the internet as much as the more developed areas, therefore making geographic location immaterial when it comes to the issues related to social media (Donohoe, 2007).

The researcher also discovered that there were statistically significant mean differences in the SWL scores based on gender, age, and geographic location. Females (n=81) scored a greater and statistically significant mean compared to their male (n=24) counterparts. In terms of age, the non-youth participants (n=16) scored a higher mean compared to their younger (n=89) counterparts, this type of difference showed to be statistically significant. Similarly, Przybylski et al. (2013) reported that the older participants scored a higher mean on life satisfaction, as opposed to their younger counterparts. With regards to geographic location the individuals residing in Gauteng (n=63) scored a higher and statistically significant SWL mean compared to individuals residing outside of Gauteng (n=42).

5.3 Limitations of Study:

To understand the construct of FoMO, the researcher learned that there are many elements to FoMO, which makes it a multifaceted construct. It seems that this area which

recently started receiving the attention of academic research, proves to have many challenges because of its novelty and intricacies. The researcher found the limitations of the present study to be as follows:

- The researcher believes that the small effect positive association between FoMO and SWL would improve if the sample size used in the present study was larger. An increased sample size, would allow more confidence in the generalisation of the research findings. As a larger sample size is believed to be more representative of the general population (Patel, Doku and Tennakoon, 2003).
- The instruments used in the present study were not normed for the South African population. This may have disadvantaged how the participants responded to some of the items in the instruments. Psychological research over the past two decades, has revealed that there are cultural differences on various constructs (Suh et al., 2016). These differences may not all be accounted for; however, they are important to note when using scales in contexts which the scales were not normed for. The researcher however believes that these scales were the best accessible scales, which could be used to measure the construct of FoMO and SWL.
- This study investigated the global construct of life satisfaction, and the researcher now believes it may also be valuable to establish the domains which may be related to life satisfaction; and to explore these areas and the relationship they may have with FoMO. In the study constructed by Przybylski et al. (2013), the concept of life satisfaction was delineated into four areas, namely: physical health, emotional health, personal relationships, and overall life satisfaction. However, the researcher is concerned about how these domains would be selected and the criteria used to select these domains, as these domains need to appeal to the general population.
- This study did not explore the satisfaction of needs in relation to FoMO, as literature suggests that FoMO may be associated with specific needs not being met (Przybylski et al., 2013; Wortham, 2011; Abel et al., 2016). An investigation of the unmet needs related to FoMO would allow a greater understanding of the construct of FoMO in the South African context.

- The method of data collection in this study was quantitative, and an online survey was circulated to the participants. The researcher believes that more information could be gathered about the construct of FoMO in the South African context through qualitative methods. Qualitative methods would also allow the researcher to explain the concept of FoMO in relation to the study. The study conducted by JWTIntelligence (2012) revealed that 8% of the sample did not understand the concept of FoMO. Only after the concept was adequately explained could the participants respond appropriately (JWTIntelligence, 2012). The mode of data collection may have overlooked the participants who do not understand the concept of FoMO adequately, and this may have disadvantaged their participation in the study.
- The data collection technique used in this study was circulating the online questionnaire through various social media platforms. This technique may have excluded the participants who may suffer from FoMO, and not particularly use social media platforms. The study solely investigated FoMO from the perspective of those individuals who use social media platforms. The concept of FoMO has been argued to not be a new phenomenon, as humans have historically had the feeling of wanting more than what they have and comparing themselves to others (Przybylski et al., 2013). Therefore, focusing on individuals who use social media, does not appropriately provide a broader understanding of this construct.
- The current study did not examine the amount of smartphone use and its relationship with FoMO or psychological difficulties. There seems to be a small to medium effect association between smartphone dependency and depression or anxiety (Elhai et al., 2016). Excessive smart phone use is argued to create a vicious cycle of psychopathology, whereby increased use causes psychopathology, which in turn causes increased smart phone use (Elhai et al., 2016).

5.4 Recommendations:

While conducting this study the researcher found that there are additional aspects related to FoMO, which may need further studying. As stated earlier, FoMO is characterised by

multiplexity. There seems to be various factors which operate in the presentation of FoMO, such as technological advancements, social media engagement and the transformation of the individual and relationships due to the cyber technological development era. The researcher believes that the following areas should be future key areas of focus in the attempt to understand FoMO:

- It would be beneficial for future studies to consider the correlates of FoMO and education level. As internet usage was positively associated with education level (Abel et al., 2016). Individuals with a higher education level were reported to spend 85% of their unoccupied time using the internet (Donohoe, 2007). Abel et al. (2016) also reported that students with the lowest GPA had lower levels of FoMO. They also stated that “freshmen” reported lower levels of FoMO compared to “juniors” (Abel et al., 2016, p. 40). This indicates that there is a need to understand how education level or education achievement is associated with FoMO levels. The present study did not explore how education level impacts social media usage and FoMO levels.
- Another area for future research is in the area of psychometric scales which could be used to measure both FoMO and SWL. The scales used in the present study were not developed for the South African population, although a lot of research has been conducted on the cultural appropriateness of these scales. For the SWL cultural differences have been reported by Suh et al. (1998) and Schimmack et al. (2002), however these differences were not directly investigated. Suh et al., (2016) conducted a study to investigate the possible reasons for cultural differences, the findings from this study revealed that self-construal predicts what information is used in the global self-evaluation.

When one considers themselves as a separate autonomous entity, then internal states appraise life satisfaction. On the other hand, if a person considers themselves in relation to others, this view translated to the concept of life satisfaction being appraised by the opinions of others (Suh et al., 2016). This study also revealed that priming also affected how individuals constructed their views of subjective wellbeing (Suh et al., 2016). This information is important as it indicates

that cultural concepts may influence the cognitive judgemental process of life satisfaction (Suh et al., 2016). There is a clear need to develop scales which may be culturally appropriate for the South African context.

- It has been argued that when individuals experience the feeling of missing out they may feel irritability, anxiety, and inadequacy. What has not been proven is that whether a predisposition to anxiety, irritability and low self-concept may lead to higher levels of FoMO (Abel et al., 2016). Abel et al. (2016) argued that a person's level of anxiety and irritability may temporarily increase, once the individual experiences a fear of missing a more rewarding experience. Abel et al. (2016) argued that Przybylski et al. (2013) developed a FoMO scale that is based on situational FoMO. There is a need for a scale which measures the psychological components of FoMO, namely anxiety, irritability, and a sense of inadequacy (Abel et al., 2016).

The current research is comparable to the study conducted by Przybylski et al. (2013), in terms of measuring situational FoMO as Abel et al. (2016) argued. Abel et al. (2016) believed that it is important to understand the psychological states, dispositions and factors which are present when one experiences FoMO. These psychological states related to FoMO may be valuable areas of investigation, as not much research has been conducted on these states and the dispositions related to FoMO.

5.5 Conclusion:

In conclusion, this study attempted to investigate the relationship between FoMO and SWL. The findings revealed that SWL has a small positive effect on FoMO. This means that an increase in SWL causes a slight increase in FoMO. If the sample size of the study were larger, perhaps the effect of this association would increase. These findings are contrary to what the researcher anticipated the relationship between FoMO and SWL would appear to be. The findings reported by Przybylski et al. (2013) revealed a negative correlation between FoMO and SWL, which is contrary to the findings of the present study. The findings of the present study urged the researcher to look beyond the "darker

side” of FoMO, and consider why there would be a positive association between SWL and FoMO.

The researcher conceded that FoMO may have benefits in promoting life satisfaction. As the individuals who may be satisfied with their lives may experience FoMO as an aid to assist them in their quest of finding meaning in their lives. According to Maslow (1949) actualisation is a process where an individual pursues meaning, and a need for creativity arises as well. Maslow (1949) argued that actualisation consists of a pursuit of meaning, and FoMO is associated with a pursuit of something greater than what one currently has. This begs the question whether satisfaction of life is attainable, or it is something one is always in pursuit. Considering this study, one could argue that even individuals may judge themselves as satisfied with their lives, however this innate need to pursue more than what one has is always present. That is when the feeling of FoMO may arise, and makes them seek more experiences, more items and ultimately more than complacency.

Davis (2012) argued that the relationship human beings have with technology is characterised by ambivalence. Techno-utopists argue that technology represents advancements in terms of various aspects. Technology represents an expansion of mankind, it has introduced advancements in physical health, social and emotional lives, and the global market sphere (Davis, 2012). This positivistic view of technology does not account for the negative impact technology may have on mankind. On the other hand, the dystonic argument postulates that technological advancement has introduced dehumanisation. This argument is largely based on the Foucaultian theory, which was grounded in prison architectures. The theory postulates that increased technological surveillance introduced by those who have more power, compromises the self-control of those under surveillance (Davis, 2012). Turkle (2011) also argued that technology introduces an element of isolation, as individuals are being accustomed to a novel manner of being alone, while being connected to others online all the time.

The researcher would like to further assert that this ambivalence may be present in FoMO as well. Findings from the present study underscore an alternate side to FoMO, as opposed to the constant association of FoMO with increased psychological distress caused by believing that one is missing something more rewarding (Przybylski et al.,

2013; Abel et al., 2016; Riordan et al., 2015). However, the researcher believes there is a more utopic lens of viewing FoMO, which extends beyond increased connectivity. The researcher postulates that FoMO may be a means through which individuals may attempt to meet higher level psychological needs. These needs may include the need for self-esteem and the need for self-actualisation. FoMO may improve one's self-esteem through comparing oneself to those like them, and motivating the individual to challenge themselves to achieve more.

The need for self-actualisation is associated with finding meaning in one's life, and doing something which one feels gives them a purpose. The need for self-actualisation is also associated with discontentment, if a person is trying to find meaning in their lives. FoMO may be a tool in this process, as it may allow individuals to expose themselves to novel perspectives and experiences in the process of finding meaning in their lives. The findings in this study have revealed that there is so much complexity in this attempt to decipher FoMO. There seems to be contextual nuances to FoMO, and among these differences there seems to be individual differences in terms of how individuals perceive their lives. The main point to take from the research and other studies attempting to understand FoMO is the ambivalence which seems to be associated with FoMO, as this ambivalence is revealed from study to study.

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Appendices:

7.1 Appendix 1: Informed Consent

Welcome to the Fear of Missing Out (Fomo) Questionnaire!!!

This survey aims to investigate how Fear of Missing Out (Fomo) impacts the lives of self-proclaimed sufferers. You do not have to take part in the study, you can choose to withdraw your participation while completing the questionnaire, or after you have completed the questionnaire or while the research data is being analysed. Your participation will be kept confidential, the only people who will have access to your information will be the researcher and a statistician. No personal identifying information will be requested from you.

The information you give will be analysed and used as part of the researcher's study. The results will be presented in the researcher's dissertation. Should you have any problems related with your participation in this research you may discuss the problem with the researcher and the researcher may direct you to someone who can help you if she cannot assist. The researcher's email address is: ellajood@gmail.com. Should the researcher not be able to provide the necessary assistance you may contact the researcher's supervisor: Prof. Monika dos Santos, email address: dsantmml@unisa.ac.za. The University of South Africa's department of Psychology and the ethics committee approved this study.

If you agree to take part in this study, please tick the appropriate block on the consent form (Please note that you should however be a South African citizen and over the age of 18 years in order to partake in this study):

- ☐ I am a South African citizen who is over the age of 18 years, and I agree to participate (1)
- ☐ I am not over the age of 18 years and/or I am not a South African citizen (2)
- ☐ I am over the age of 18 years and I am South African citizen, however I do not agree to participate (3)

7.2 Appendix 2: Online Questionnaire

Welcome to the Fear of Missing Out (Fomo) Questionnaire!!!

Please indicate your age

- ☐ 18-21 (1)
- ☐ 22-25 (2)
- ☐ 26-28 (3)
- ☐ 29-34 (4)
- ☐ 35-38 (5)
- ☐ 39 and above (6)

Please indicate your gender

- ☐ Male (1)
- ☐ Female (2)

Please indicate your province

- ☐ Gauteng (1)
- ☐ Limpopo (2)
- ☐ Free-State (3)
- ☐ KwaZulu-Natal (4)
- ☐ Northern Cape (5)
- ☐ Western Cape (6)
- ☐ Eastern Cape (7)
- ☐ North West (8)
- ☐ Mpumalanga (9)

How often do you experience Fear Of Missing Out (Fomo)

- ☐ Never (1)
- ☐ Less than Once a Month (2)
- ☐ Once a Month (3)
- ☐ 2-3 Times a Month (4)
- ☐ Once a Week (5)
- ☐ 2-3 Times a Week (6)
- ☐ Daily (7)

Please indicate the social network sites you use (please tick all that apply)

- ☐ FaceBook (1)
- ☐ Twitter (2)
- ☐ Instagram (3)
- ☐ LinkedIn (4)
- ☐ Snapchat (5)
- ☐ Whatsapp (6)
- ☐ Mixit (7)
- ☐ BlackBerry Messengers (8)
- ☐ Pinterest (9)

Please provide your email address (It will be solely used to provide you with a summary of the research findings)

Below is a collection of statements about your everyday experience. Using the scale provided please indicate how true each statement is of your general experiences.

Please answer according to what really reflects your experiences rather than what you think your experiences should be. Please treat each item separately from every other item.

	Not at all true of me (1)	Slightly true of me (2)	Moderately true of me (3)	Very true of me (4)	Extremely true of me (5)
I get worried when I find out my friends are having fun without me. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important that I understand my friends "in jokes." (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I fear others have more rewarding experiences than me. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It bothers me when I miss an opportunity to meet up with friends. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I go on vacation, I continue to keep tabs on what my friends are doing. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

When I have a good time it is important for me to share the details online (e.g. updating status). (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sometimes, I wonder if I spend too much time keeping up with what is going on. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I miss out on a planned get-together it bothers me. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I fear my friends have more rewarding experiences than me. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get anxious when I don't know what my friends are up to. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Below are five statements that you may agree or disagree with. Using the scale below, indicate your agreement or disagreement with each item. Please be open and honest in your responding.

	Strongly agree (1)	Agree (2)	Slightly agree (3)	Neither agree nor disagree (4)	Slightly disagree (5)	Disagree (6)	Strongly Disagree (7)
In most ways my life is close to my ideal. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The conditions of my life are excellent. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with my life. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
So far I have gotten the important things I want in life. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I could live my life over, I would change almost nothing. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of survey!!! Thank you for your participation. If you need any further information, you may contact the researcher at: ellajood@gmail.com